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INSETS.

Circulars

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No Better Method Exists

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Write to the Publisher

of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C., for full particulars as to terms and instructions for printers.

Summary.

A concession in regard to naming remedies is announced by the Board of Inland Revenue (p. 985).

Existing labels may be used up to September 30 without risk of proceedings being taken by the Board against any person.

This applies to qualified and unqualified chemists, limited companies, and other shopkeepers.

THE B.P.C. pink circular is out (p. 969).

CATTLE-ITCH is the subject of a useful note on p. 932.

DENTAL NOTES are a feature in this issue. See p. 990.

METHYLATED SPIRIT is likely to be 2d. per gal. dearer (p. 933).

ANOTHER salt for students of pharmacy to analyse is announced on p. 968.

THE CHEMISTS of the Hartlepool have successfully launched a local association (p. 976).

A MENTHOL CONTRACT is the subject of interesting litigation in Japan, which we report on p. 931.

"MR. EKINS," by Dr. John Attfield, F.R.S., is the title of an entertaining little epistle on p. 991.

THE EXAMINATION IN BANKRUPTCY of the partners of Ashmore & Sons, Mincing Lane, is reported on p. 983.

THE JACOB BELL SCHOLARSHIPS EXAMINATION was held this week. We epitomise the questions on p. 991.

PROFESSOR W. J. POPE, F.R.S., has been presented with the Longstaff medal of the Chemical Society (p. 977).

EARLY-CLOSING LEGISLATION looks like going forward owing to a proposed Avebury-Dilke amalgamation (p. 981).

OUR PARIS CORRESPONDENT gives some particulars regarding the centenary of the Society of Pharmacy there (p. 972).

FACTORS for testing citronella oil are communicated by Messrs. Parry and Bennett (p. 993). We comment on their observations on p. 985.

SHEFFIELD CHEMISTS are, through Mr. Newsholme, to welcome the British Pharmaceutical Conference to the City of Steel in 1904 (p. 976).

STARCH exists in capsicums. The fact has not hitherto been definitely observed, but Mr. J. C. Steal proves it in an illustrated article on p. 1000.

THE Ethics Committee of the British Medical Association has been chastising the doctors named in a list issued by Parkes' Drug-stores (p. 936).

THE TARIFF agreed to by the South African Commission on a Customs Union is printed, so far as it interests the chemical and drug trades, on p. 993.

DR. T. E. THORPE has devised an electrolytic method of detecting arsenic in beer, which he described to the Chemical Society on Wednesday (p. 977).

A MAN who was in the habit of getting a hypnotic mixture from Messrs. Vines & Froom, Aldersgate Street, died, and it is stated that he got the wrong medicine. The inquest is reported on p. 970.

ALEXANDER CROSS & SONS (LIMITED), Glasgow, have been fined under Section 17 of the Pharmacy Act for selling to an unknown person, and otherwise improperly, sufficient arsenic to kill 200 people (p. 978).

A WELL-KNOWN EDINBURGH VETERINARIAN, who is also a chemist and druggist, is giving 15,000l. towards promoting the affiliation of the Royal (Dick) Veterinary College with the Edinburgh University (p. 971).

THE ABERDEEN Sheriff has decided that a co-operative society which has signed an anti-cutting agreement and continues to give checks to customers on purchases of the protected article does not break the agreement (p. 978).

THE Bradford County Court Judge has argued with counsel the question of committing to prison those who do not pay Pharmacy Act penalties which they have incurred. If the Judge's view is right, the Pharmaceutical Society is armed with a strong weapon against offenders (p. 979).

THE DRUG AND CHEMICAL MARKETS remain very depressed, shellac being the only article showing any life. Cream of tartar, French and German refined camphor, and saltpetre are higher. Cascara sagrada, sulphate of copper, cajuput, and geranium oils are firmer. Castor oil is easier, and quinine in second-hands is lower. A reduction in makers' prices would not be surprising (p. 995).

Corner for Students.

CONDUCTED BY LEONARD DOBBIN, PH.D.

Students, please note. All communications should be addressed to the Editor of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

All communications and reports must bear the names and addresses of the writers, not necessarily for publication. The reports of those who ignore this rule are liable not to be dealt with.

QUALITATIVE ANALYSIS FOR JUNIOR STUDENTS.

A MIXTURE of not more than three salts will form the subject of the next exercise in qualitative analysis. The mixture will comprise acids and inorganic bases occurring in the British Pharmacopœia, and is to be submitted to a thorough systematic examination, all its constituents are to be detected, and proof is to be given that the substances detected are the only constituents of the mixture.

Students' applications for portions of the mixture of salts (accompanied by a *stamped and addressed envelope*, not a stamp merely) will be received up to Tuesday, June 23, and the samples will be posted on the following day.

Students' reports will be received up to Saturday, July 4. Each report should contain a concise account of the work done, and should include a list of the constituents detected. In this list any substance regarded as an accidental impurity should be distinguished from the essential constituents of the salts composing the mixture.

SPECIAL NOTE.—The prizes in this series of analyses will be awarded only to apprentices or assistants who are preparing for the Qualifying examination of the Pharmaceutical Society of Great Britain or of Ireland, which fact *must be attested on their reports*. Others may obtain specimens of the salts, and their reports will be separately adjudicated, but they will be regarded as *hors concours*. Correspondents who do not state that they are preparing for a qualifying examination will be included in the latter list.

English News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Brevities.

Mr. Chas. Turner, F.C.S., writing to the *Manchester Evening News* in regard to the sale of oxalic acid, says, "As a rule chemists exercise more care than the law requires rather than less."

The Kidderminster Chamber of Commerce have adopted the petition in favour of the modification of the Pharmacy Act with regard to the sale of poisonous compounds used in agriculture and horticulture.

The Grand Committee of St. Thomas's Hospital on June 10 resolved to raise the salary of Mr. Edmund White, pharmacist, from 350*l.* to 450*l.* per annum. This was approved by the Court of Governors on June 17.

Frederick Naylor (20) was committed for trial at Leeds Police Court on June 13, on a charge of breaking into the shop of Boots Cash Chemists (Limited) at the corner of Briggate and King Edward VII. Street, Leeds.

At Liverpool on Friday, June 12, while some boxes of paper were being received into the works of the Photo Filigrane Company, Seel Street, one of them fell on to a carboy of nitric acid and ignited. The acid-fumes were inhaled by a foreman at the works, who died the following morning.

The Pwllheli County Court Judge has decided against Mr. John Williams, chemist, Criccieth, in an action brought against him at this month's sitting by his wife (who had been granted a separation order from him by the local Magistrates) for the recovery of 32*l.* worth of furniture. Costs were also granted against defendant.

At Birmingham County Court on June 10, Richard John Bradshaw, of Birmingham, sued Messrs. Wyleys (Limited), manufacturing chemists, Coventry, for damages alleged to have been caused by the negligence of their servant, which resulted in a collision between plaintiff's trap and their horse and float. After hearing evidence, the jury found for the defendants, and judgment was entered accordingly.

At Grimsby on June 11, John Reinecke, botanical brewer, Bristol, was summoned for keeping a refreshment-house without a licence. Mr. Denniss, who prosecuted for the Inland Revenue, sought to show that the botanical drinks sold by defendant were merely sugar solutions flavoured with small quantities of extract of herbs. Mr. Schultess Young, barrister, who defended, contended that the drinks were medicated with extracts made according to the Pharmacopœia. The Bench reserved their decision.

Amongst the exhibitors at the Royal Counties Agricultural Show, held at Southampton last week, were Messrs. Wride & Co., chemists, Southampton, who exhibited Wride's Irish pig-powders, powder weed-killers, special horse-powders, and other veterinary specialties; Chemical-works (late H. & E. Albert, Limited, London), who showed some striking effects of the basic slag as applied to grass-land in the southern counties; and Messrs. Spooner & Bailey, of Eling, had a nice little stand containing a varied assortment of chemical manures and foodstuffs.

Re-direction of Letters.

The Postmaster-General intimates that on and after July 1 next any person whose correspondence has been officially re-directed for three years may apply for an extension of the privilege on prepayment of a fee of 5*s.* a year. A separate application must be made at the end of each year.

"Long and Faithful Service."

The Lord Mayor of Liverpool (Councillor W. Watson Rutherford, M.P.) and the Lady Mayoress are, in connection with the King's birthday-celebration on June 26, desirous of acknowledging the obligation of the community to all men and women of the city who are specially distinguished for long and faithful service, meaning thereby those who have been in continuous service for at least twenty years with an employer in Liverpool. This unique recognition will embrace over sixty employés of Messrs. Evans Sons Lescher & Webb (Limited), 56 Hanover Street, Liverpool, who are qualified to accept the Lord Mayor's invitation.

Commercial Intelligence Committee and Tariffs.

A meeting of the Board of Trade Advisory Committee on Commercial Intelligence was held on Wednesday, June 17, at the offices of the Board, in Richmond Terrace, Whitehall, Sir Alfred Bateman, K.C.M.G., in the chair. The principal business had relation to the new Russian "general" tariff and the proposed new "general" tariff for Austria-Hungary, and the best means of obtaining the views of the commercial community with regard to the effect of these tariffs on British trade. A sub-committee was appointed to communicate with the principal Chambers of Commerce and other bodies on the subject, and it was also decided to take the necessary steps to obtain the views of the commercial community in India and the colonies with regard to these tariffs.

The London Hospital.

June 11 was a red-letter day in East London, owing to the visit of the King and Queen to open the new out-patients' department at the London Hospital. The out-patients' department is a separate block, but connected with the main hospital by a subway, and is entered from Oxford Street. The ground floor is taken up with the large waiting-hall, big enough to seat 1,000 persons, and around are the dispensaries and consulting-rooms. The patients are separated into medical and surgical cases, and in like manner the two streams of patients obtain their medicines at opposite ends

of the dispensary. It is an interesting sight to watch the busy scene, as patient after patient is supplied with medicine by the white-robed dispensers, but what appeals even more to a pharmacist is the laboratory in the basement. Everything, as in the dispensary, is spick and span, and the glazed bricks with which the walls are covered contribute to the general air of cleanliness which pervades the place. Mr. J. A. Jennings, the chief dispenser, who recently succeeded Mr. E. W. Morris, is rapidly getting the new machinery in working order. Here are made galenicals, plasters, pills, tablets, and lozenges, and the stock mixtures for filling up the containers in the dispensary. A round dozen of qualified chemists are kept fully occupied, as well as a corps of laboratory assistants. The lupus-room, which the Queen opened, is another interesting part of the hospital. Both the King and Queen spent much time in this department, watching the working of the Finsen lamps and talking to the patients. On the occasion of the visit, the Mayor of Stepney (Mr. Henry Potter, of Potter & Clarke, Artillery Lane, E.), presented an address welcoming their Majesties to the borough, which has a population of nearly 300,000 persons. The King shook hands with the Mayor and handed him a written reply.

It is to be regretted that Mr. E. W. Morris, who now occupies the secretaryship of the hospital, is suffering from a nervous breakdown, as the result of his almost superhuman exertions in preparing for the Royal visit, but we are glad to be able to chronicle a decided improvement in his condition.

Apothecaries' Assistants.

We are informed that the Association of Assistant Licentiates of the Apothecaries' Halls, London and Dublin, have appointed the following office-bearers, besides about fifty Hon. Local Secretaries in Great Britain and Ireland:

PRESIDENT.—†Mr. A. T. Gott, Bradford.

VICE-PRESIDENTS.—Messrs. †C. W. Botwood, D.Sc., Ph.C., York; †C. W. Brumwell, Ph.C., London; *Joseph N. Cutts, Chesterfield; *Clement B. Vance, L.P.S.I., Greystones.

TREASURER.—*Mr. Herbert Birstow, Bradford.

SOLICITOR.—Mr. Latimer Darlington, D.C.L., Bradford.

SECRETARY.—*Mr. Chas. F. Forshaw, D.D.S., 48 Hanover Square, Bradford.

COUNCIL.—Messrs. *Edgar B. Aplin, Dublin; †R. H. D. Bright, Peterborough; †D. Bradfield, Somerton; †J. Brownton, London; *Jas. T. Doyle, Dublin; *F. Doran, Dublin; †J. L. Durbin, Paignton; †E. N. Evans, London; †A. E. Humphreys, Portmadoc; †L. Hill, Norbiton; *James McMichael, Dublin; *Maris McNally, Dublin; †E. A. Onyon, Eye; †Chas. M. Snow, Filey; *W. Stevens, Woolwich; and †Herbert J. Sharp, London.

Those marked * are assistants of the Apothecaries' Hall of Ireland, and those with † of the Apothecaries' Society of London.

British Pharmaceutical Conference.

The pink circular of the fortieth annual meeting at Bristol has been issued this week. The circular gives fuller particulars of the way the time of the visitors is to be apportioned, from 7.30 P.M. on July 27 to the annual meeting of the Federation of Local Associations at 9.45 A.M. on July 31. The books of tickets are 10s. 6d. each; No. 1 covers Tuesday and Wednesday, and No. 2 is for the whole-day excursion on the Thursday. The tickets will be ready on June 20, and application for them should be made to Mr. H. E. Boorne, the Hon. Secretary, 49 Woodstock Road, Redland Green, Bristol.

Contracts.

The Isle of Wight Board of Guardians have accepted the tenders of Mr. E. H. Morris, Newport, and Messrs. C. J. Hewlett & Son, of London, for the supply of druggists' goods to the workhouse.

At a meeting of the Committee of Management of the Royal Portsmouth, Portsea, and Gosport Hospital, held on June 12, there was some discussion on the question of whether drugs should be contracted for. Mr. Cooper insisted on the necessity for contracting, but Dr. Ward Cousins and Dr. Emmett warmly insisted that the method hitherto adopted was equal to contracting. The Drug Committee invited the wholesale houses to quote prices. They selected the lowest quotations, and had 15 per cent. knocked off as well. Alderman Scott Foster, chemist and druggist, agreed that the drugs cost considerably more than they

should do. He reminded the Drug Committee that there was a considerable difference between price-lists issued by the wholesale houses who supplied chemists and those of houses who supplied the doctors. If 15 per cent. were taken off the lists of the houses supplying doctors, they might even then not be so low as the prices quoted for chemists. It was understood that in future tenders will be invited for the drugs.

The Boots Scholarships.

It may not be generally known that Mr. Jesse Boot offers to assistants who have been two years in the service of the Boots companies four scholarships (two of 52l. 10s. each, and two of 35l. each) to help them to qualify for the pharmaceutical examinations. Each candidate must be 20 years of age, and must produce a certificate of registration as an apprentice or student of the Pharmaceutical Society. Successful candidates are required to take a six months' course at a recognised school of pharmacy (the course to commence within six months of the award being made) and to present themselves for the Minor at the close of the course. To secure the scholarships a competitive examination must be passed, embracing a fair knowledge of botany, chemistry (theoretical, practical, and organic), materia medica, pharmacy, and practical pharmacy and dispensing. The examinations for 1903 are to be held soon.

Birmingham Notes.

Of the 15,000l. collected for the Hospital Saturday (June 13) the chemical and pharmaceutical firms came out well, upwards of 500l. being subscribed by those employed by them.

The exhibition of fine specimens of crude drugs and their preparations has caught on in our city. Messrs. Southall show products such as gum resins, &c., and other high-class pharmacists are following their example.

The premises lately occupied by Messrs. Gould are now closed, and preparation is being made for pulling down and rebuilding, when once more a chemist's shop will be seen there. In the meantime Messrs. Gould have secured temporary premises near by.

A sale by auction at a botanical gardens is novel. It happened at Edgbaston last week, duplicates and surplus stock to meet the heavy expenses incurred in rebuilding some of the greenhouses. It will not impair the usefulness of the gardens for the students of pharmacy who resort thither for botanical study.

The examination in materia medica and pharmacy for the medicals at the university was held this week, when each candidate was subjected to a practical, written, and *viva voce* examination. Several B.P. preparations had to be made, and the stock-test of turpentine-and-yolk-of-egg mixture was included. There were fifteen candidates. Dr. Coole Neale was the internal examiner, and Mr. E. W. Mann, Ph.C., F.I.C. (Southall Brothers & Barclay), attended in place of Mr. J. Barclay, B. Sc., the external examiner.

Co-operative Trading.

The annual report of the Traders' Defence Association of England and Wales states in regard to the Association's campaign against co-operative trading that a special feature has been the exhibition in shop-windows of parcels of goods purchased from the co-operative store, with similar articles from the private traders. In every case the store goods were not only much higher in price, but in many instances inferior in quality. These experiments have had excellent results.

Fires.

On June 16, a slight fire occurred on the premises of the County Co-operative Drug Company at 107 Old Town Street, Plymouth, caused through a solution of beeswax in turpentine becoming ignited. The outbreak was extinguished before any damage was done.

A destructive fire occurred at a saltworks, on June 16, belonging to Mr. Henry Seddon, Middlewich. Two buildings which were of comparatively recent erection, and had cost something like 4,000l. were destroyed. They were three storeys in height, and, in addition to several hundred tons of salt, nearly 100,000 new sacks were stored there. The damage done is estimated at between 6,000l. and 7,000l.

The Chemist and the Coroner.

At an inquiry at Felinfoel, Llanelly, on June 16, into the death of a brewery manager, Mr. Gwilym Evans, J.P., pharmaceutical chemist, who was foreman of the jury, put a question in Welsh to one of the witnesses, whereupon the Coroner (Mr. W. B. Roderick) said it would be better for the question to be put in English. Mr. Evans said the witness understood Welsh better than English. The Coroner reiterated that the question must be put in English; it could afterwards be interpreted into Welsh. Mr. Evans: We are in a Welsh court, and I shall put my questions in Welsh. The Coroner (severely): You must not, sir, as long as I am Coroner of this court. If you were a Welshman, and did not understand English, I would excuse you. This closed the incident.

Was it the Wrong Medicine?

At the City Mortuary, Golden Lane, E.C., on June 15, Dr. F. J. Waldo, the City Coroner, opened an inquiry into the death of Henry Harris (52), a carpet-designer, whose death is alleged to have been due to poisoning through the mistake of a chemist's assistant.

Mr. Rupert Smyth appeared on behalf of Messrs. Vines & Froom, chemists, of 75 Aldersgate Street, E.C., and also on behalf of Mr. John Albert Atkin, a qualified chemist in their employ.

Andres Cyril Marcel, a journalist, stated that he knew deceased, who called at his office on June 12. He appeared strange and excited, and they adjourned to a public-house in Queen Victoria Street, where deceased was suddenly taken violently ill. He was removed to St. Bartholomew's Hospital, but before that he made the following statement:

At 7 o'clock this evening I went to Vines & Froom in Aldersgate Street, opposite the railway station, and asked for my usual medicine. A fresh assistant served me, and after I had drunk it I suddenly felt ill in the shop. It was harsh to the taste, and gave me a fiery pain in the throat. I expostulated with the chemist's assistant, and told him he had not given me morphia. To this he assented, and apologised, saying, "I will replace the medicine and give you the chloral you want."

Witness added that he believed the deceased said, "and give you the hydrochloric chloral you want," but he could not be sure of the word "hydrochloric," though the deceased used a word something like that. He had heard from the deceased that he had taken morphia for thirty years, and had got it from this firm of chemists for about twenty years. At the hospital he told the doctor what the deceased had said, and then went to Vines & Froom, and told them, but on returning to the hospital he found that deceased was dead.

Cross-examined by Mr. Smyth: The deceased did not touch the drink that he called for, but afterwards witness got some brandy and he had a little of that. Witness did not consider the deceased a sickly man, and had never anticipated his death.

The Coroner: And you are sure about the words of this statement?

Witness: Positive; besides, he told the hospital doctor himself the same story.

Sidney Harris, a son of the deceased, said his father was in the habit of taking morphia, which he got from Messrs. Vines & Froom.

The Coroner: How do you know?

Witness: I often used to go for it. My father was well known at the shop.

The Coroner: Did you take a prescription from a doctor?

Witness: No, nothing at all.

The Coroner: What did you ask for, then?

Witness: Well, they knew who I was and that I had come from my father, and they used to give me the bottle.

The Coroner: Did you take no doctor's order?

Witness: No. I might once or twice have taken a scribbled note from my father.

The Coroner: I cannot say that I understand all this, but fortunately the chemist is represented here, and he will have an opportunity of enlightening us.

Witness said, further, that he had known deceased take $\frac{1}{2}$ oz. at a time, but he could not tell the strength of the solution supplied. When he went himself he generally had a dose whilst in the shop.

The Coroner: Are you positive of that?

Witness: He has often told me so, and he says so in his last words.

The Coroner: I should have thought it a most unusual thing for a chemist to give a man a dose of morphia without a doctor's prescription, and let him drink it in the shop; but we shall hear from the chemist about it.

Dr. Harold Wale, house physician at St. Bartholomew's Hospital, in his evidence said deceased repeated practically the same story as that told by Marcel to him and to the nurse. He sent Marcel to the chemist's to find out what had been supplied. The patient died before he could determine from the symptoms the cause of death. He had since made an autopsy, and had preserved the stomach and contents for analysis. There were no traces of morphia that he could find.

The Coroner: It is most necessary, in the interests of all parties, that an analysis be made to determine the precise cause of the deceased's death, but the chemist's assistant is here, and is anxious to give his version of the matter. Of course anything he says will be taken down in writing, and may be used in evidence against him.

Mr. Smyth: Would it not, Mr. Coroner, be better to let Mr. Atkin give his statement at the adjournment?

The Coroner: That is for him to decide.

Mr. Smyth: He will go into the box on the next occasion, but I hope his not going into the box to-day will not lead to any false impressions, for both he and Mr. Vines are most anxious to render to the Court all the assistance in their power. I may say that Mr. Atkin is a qualified man.

The hearing was adjourned for a fortnight.

The Dispenser's Directions.

At a meeting of the Cardiff Board of Guardians on Saturday, a report was presented by the Dispensary Committee stating that the number of prescriptions made up for the patients in the medical relief districts during the past month was 2,447. The committee recommended that the dispenser should be required to write the name of the patient on each bottle of medicine or other package dispensed, and that the dispenser be directed not to supply medicines or liniments containing poisons in dangerous quantities to children under 10 years of age, and when supplying such articles to children over that age to caution them as to the contents. The report was adopted.

The Walking Craze.

On June 13, in spite of the rain, the assistants in the department of Harrod's (Limited), Brompton Road, W., had a walking-match from Hyde Park Corner to Windsor—a distance of twenty-three miles. Eight competitors started, and the route was through Brentford, Hounslow, Colnbrook, and Datchet. All the starters came in, the first three being Messrs. Smith, Kelsey, and Curtis, with only half a minute between the first and second. Prizes were given by Messrs. R. J. Reuter and T. G. Heighington.

The Week's Poisonings.

Nine deaths from poisoning are reported as having taken place during the past week, four of which were apparently misadventures. The scheduled poisons included chlorodyne (two), oxalic acid, and laudanum (three); camphor, ammonia, and nitric acid were the unscheduled mediums employed. John Beverley, a Manchester butcher, took 3 oz. of chlorodyne in one draught. The bottle, duly labelled "Poison" in red letters, was found in his bed. Mrs. Bowers, of Sandown, Isle of Wight, who was found dead, was addicted to the chlorodyne habit. At the inquest Mr. William Adamson, chemist and druggist, manager to the Timothy White Company, of Sandown, deposed to selling several bottles to a boy who had come scores of times to the shop. The bottle (produced) was sold by him, and held 1 oz. of chlorodyne "which contained 4 gr. of morphia, 8 drops of tincture of belladonna, and 64 drops of chloroform." The Coroner (Mr. F. A. Joyce) said no blame appeared to be attachable to anyone, but he was strongly of opinion that an enactment should be passed whereby poisons of that kind should not be sold to people without medical advice. Oxalic acid was taken by a Paddington woman named Hall. Charlotte Easthope, of Halton-le-Gate, purchased laudanum from Mr. H. R. K. Bell, chemist and druggist, and from Mr.

W. R. Milligan, chemist and druggist, both of Haltwhistle, stating in each case that it was wanted for a cough-mixture. She took both quantities at once and died. A Blackburn woman and a Newcastle woman each took laudanum in overdose. At an inquest held at Westminster touching the death of a widow named Annie Robinson it was stated that a *post-mortem* examination showed that death was caused by heart-failure accelerated by camphor-poisoning. At Liverpool, a foreman printer broke a carboy of nitric acid. He became ill and died, death being attributed to poisoning by the fumes of nitric acid. Sarah Cockhead (82), of Upper Holloway, asked a young woman to fetch her some brandy. The young woman appears to have gone to a neighbouring oil-shop instead and purchased a pennyworth of liquid ammonia, which she gave to the old woman. Mrs. Cockhead drank the ammonia, and died from shock. At the inquest the oilman said he sold several poisons for trade-purposes. It was not his practice to label the bottles with the word "poison." The Coroner (Dr. G. Danford Thomas) said that oil-shop keepers were not by law bound to label bottles in which they sold poison. It was, however, much better that they should do so, and also to state the poison sold. The expense of such labels would be only a trifle, and it would be the means of preventing a number of cases of poisoning. He had had numerous cases in which it had been shown that poisons purchased at oil-shops and served in mineral-water bottles had been drunk by unsuspecting persons by mistake. Owing to the numerous cases of carbolic-acid poisoning that took place, the Legislature at last placed carbolic acid under the provisions of the Sale of Poisons Act. Consequently, only chemists could sell it; but still a preparation from coal-tar, called carbolic-acid disinfectant, was sold by oil-shop keepers. There was no doubt that the Legislature did not include in the Act many of the poisons sold by oil-shop keepers, because they did not desire to restrict trade, it never being contemplated that poisons could, or would, be sold retail in small quantities. It was time that action was taken to compel poisons sold retail to be properly labelled. The jury, in returning a verdict of accidental death, added a rider advising that oil-shop keepers should, when selling poisons, not only label the bottles with the word "poison," but also with the name of the poison that the bottle contained. The Coroner said he would send a copy of the jury's recommendation to the Home Secretary, with a view to some action being taken. The Southend Coroner (Mr. C. E. Lewis) held an inquest on June 12 on the body of a six-days-old child named Maskell. The evidence was to the effect that it died after being given some dill-water purchased at the pharmacy of Mr. Crookham, chemist and druggist, of Milton Road. Mr. Crookham stated that by mistake he used the same measure in which he had previously served liquid ammonia for a clean one. When the bottle containing the dill-water was brought back he tasted the contents, which were slightly flavoured with ammonia. Dr. J. C. Smellie said that death was not due to poisoning from ammonia, but to the injury done by the ammonia and shock. The Coroner said he thought Mr. Crookham had given his evidence very straightforwardly, and that what he did he did inadvertently. A verdict of death from misadventure was returned by the jury.

Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Aerated-water Bottles.

In the Dublin Rolls Court on June 11 a case was heard by the Master of the Rolls, in which C. J. Hassett, mineral-water manufacturer, Ennis, sought an injunction to restrain Joseph W. Lee, of Gort, from using plaintiff's embossed bottles for mineral waters of defendant's manufacture. The defendant did not appear, and the injunction was granted.

Vacancy on the Pharmaceutical Council.

There is some surprise in pharmaceutical circles in Dublin that the vacancy on the Council of the Pharmaceutical Society caused through the death of Mr. G. H. Grindley was not filled up at this month's meeting. There ought to be no

lack of material to select from, as at the last election four candidates (Mr. J. I. Bernard, Sir Thomas Robinson, Dr. J. C. McWalter, and Mr. Arthur J. Cahill) went to the poll without success, and several others were then not altogether averse to taking a seat on the Council.

Cod-Liver-Oil Substitutes.

At the last meeting of the Bandon Board of Guardians, a letter was read from the Cork Chemical and Drug Company stating that they found it impossible to execute any orders for cod-liver oil (the article being practically non-procurable), and they suggested the substitution of such preparations as extract of malt, syrup of hypophosphites, or petroleum emulsion. It was ordered that a copy of the communication be furnished to each medical officer in the union. Dr. Hennessy said extract of malt was the best substitute.

Presentation.

On June 12 Mr. F. J. Gillespie, L.P.S.I., late of Messrs. S. C. Nicholl & Co., pharmaceutical chemists, Donegall Place, Belfast, was the recipient of a handsome present on the occasion of his leaving for South Africa, where he has obtained an appointment. A most enjoyable evening was spent at the Model Café, under the chairmanship of Mr. Robt. Cairns, the programme consisting of songs and recitations, contributed by Messrs. Donaghy, Ginnette, McCully, McKay, Ritchie, Scott, and Clements. Mr. Horatio Todd, L.P.S.I., manager of Messrs. Nicholl's Connswater branch, made the presentation, which consisted of a gold Albert and pendant, after which Mr. Gillespie suitably replied.

Scotch News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

A Plucky Apprentice.

On June 10 an old man fell into the Tay from the Esplanade at Dundee and was in great danger of being carried away by the current. An apprentice-chemist named Henry Dunn, who was cycling past saw the occurrence, dismounted, and went over the protection-wall to the rescue. Dunn, with the help of other passers-by, succeeded in fishing the man out, and by applying artificial respiration kept him alive until his removal to the infirmary.

The Royal (Dick) Veterinary College.

A scheme of reconstruction has been proposed of the Royal (Dick) Veterinary College, Edinburgh. The scheme provides for a new administrative Board to manage the property and affairs of the college and the trust created in connection with it by the late Professor William Dick. The University of Edinburgh is to make arrangements under which a degree in veterinary science shall be conferred upon the students of the college who pass through the curriculum of the college and attend such classes in the University as may be prescribed for the purposes of the degree. The college is to be recognised by the University as an extra-mural veterinary school. Mr. A. I. McCallum, veterinary surgeon and chemist and druggist, Edinburgh, has offered 15,000*l.* if the scheme is carried through, and he is to be one of the members of the new administrative Board.

Sport.

The second of the summer swimming handicaps took place at Dalry Baths on June 11. A keen race resulted in a win by a touch for first place. The placings were as follows: 1, E. O. Rowland (scratch); 2, G. H. C. Rowland (9 secs.); 3, J. Weston (13 secs.). The next handicap takes place on June 18.

A walking-match arranged among chemists' assistants in Dundee, took place on June 15. About sixteen had entered, but only nine toed the line. These were Alexander Barrie, James Duff, George Lindsay, Robert Wilkie, George Whitelaw, Henry Dunn, Daniel Wilson, James Robertson, and Harold Leitch. The distance was from Longforgan to the Esplanade, Dundee, about 7½ miles. The start was made

at 9.10 P.M., and at the finish Barry came in at 10.23 P.M., Robertson forty-five seconds later, then Lindsay at 10.25, and Whitlaw thirty seconds after. Through the whole walk Barrie kept a swinging pace, and well deserves the silver-mounted walking-stick to be presented to him.

Glasgow Notes.

Cheap & Good (Limited) are opening branches at 174 Garscube Road, Glasgow, and at 12 Wellmeadow, Paisley.

Mr. Blackwood, St. George's Road, has acquired the shop of Dr. Smith, Maitland Street, which he will conduct as a branch.

One of the oldest and best-known doctors' shops in the East End, which was occupied by several generations of medical men of the Dick family, and on the death of the last of these, by Mr. Suttie, druggists' sundriesman, has now been converted into a draper's shop.

There is a persistent report in circulation to the effect that a well-known firm of English company retail "chemists" are making efforts to acquire certain established store businesses in Glasgow, but so far as Messrs. Cockburn's business is concerned, the rumour is unfounded.

It is suggested in pharmaceutical circles that the vacancy on the Pharmaceutical Council should be filled by the appointment of Mr. W. L. Currie by the Council. His position on the poll would justify his selection, while the full representation of Scotland would thus be restored.

French News.

(From our Paris Correspondent.)

THE VIOLET RIBBON.—The President of the Republic has nominated the following pharmacists "Officers of Public Instruction" on the occasion of his journey in Algeria and other functions: MM. Vernade and Brisenmeister, of Paris; MM. Beulaygue and Grimal, extra professors at the Algiers School of Medicine and Pharmacy; and M. Molière, of Constantine (Algiers).

A MEMORIAL TO PROFESSOR BLEICHER.—On June 7, 1901, Professor Bleicher, Director of the Nancy Superior School of Pharmacy, was assassinated by M. Raymond Four, pharmacist, under circumstances fully reported at the time in these columns. The second anniversary of the tragedy has just been celebrated by the unveiling of a memorial to M. Bleicher. The life and work of the "victim of duty" were eulogised by MM. Godfrin (his successor as Director of the Schools), Adam (Rector of Nancy University), Macaire (President of the Mulhouse Natural History Society), and Bayet.

THE DIPHTHERITIC-SERUM PASTILLES alluded to in a recent issue were the result of Dr. Martin's endeavours to hit on a scheme for avoiding the hypodermic injections so disagreeable to many persons. He first tried touching the false membranes with a cotton-wool pad, such as is often used for sore throats, but steeped in serum. But the contact was too brief, and results were *nil*. He then thought of mixing the serum with gum to form a lozenge. These pastilles appear to give excellent results. It is thought that they will be largely used as a preventive. Many parents and relations of diphtheritic children will not submit to a prophylactic injection of serum, but would have no objection to lozenges. Again, it would appear that many children supposed to be cured, and returning to school, have still germs in their throats, and the use of pastilles, which might be made sufficiently palatable to ensure their constant consumption, might often avert serious danger.

THE PROPOSED MEDICINE-STAMP LAW, which M. de Beaurgard has deposited at the bureau of the Chamber of Deputies, commences with an "exposé des motifs." In this he sets forth that while the unhappy peasant is burdened with taxes of every kind, "no one has thought of establishing the most modest tax on those who make from 100 to 200 per cent. profit on pharmaceutical proprietaries." To tax manufacturing pharmacists is all for their good, he continues; "while the profit will not be appreciably diminished, they will benefit by being able to furnish

abroad a mark of origin and authenticity, and will thus possess better facilities for prosecuting imitators." He concludes by pointing out that this tax (of a $\frac{1}{2}$ d. stamp on articles from 1 to 5f., and $\frac{1}{2}$ d. extra for each extra 5f.—i.e., 1 per cent. roughly) is admitted even by those interested to be capable of immediately producing from five to ten million francs per annum.

INTERNATIONAL MEDICAMENTS.—Are any of the "international medicaments" recommended by the Brussels Congress likely to be embodied in national Pharmacopœias and replace the existing formulæ? is the question M. Carles, of Bordeaux, studies in detail. In cosmopolitan places (like Paris, the French thermal stations, and health-resorts) and the central and quayside pharmacies of large seaports, an "international" medicament would probably soon become popularised; and, after all, a respectable proportion of French *officines* come under the heads above mentioned. M. Carles criticises each medicament singly, and concludes that, while some of the international recommendations might with advantage be embodied in the French Codex, the adoption of others "would not constitute a pharmaceutical progress." Syrup of ipecacuanha is used in France as an emetic, so that the national formula must be retained side by side with the international. A tincture of iodine with alcohol at 95° might sometimes create a difficulty, as alcohol over 90° is not always easy to obtain. Some elixirs prepared with alcohol at 70° might not suit all stomachs. On the other hand, it would, perhaps, be no great harm if extract of digitalis were struck out of the French Codex, as it was out of the international list.

A PHARMACEUTICAL DRAMA of twenty-one years ago is recalled by the recent release of Gabrielle Fenayrou from Clermont Prison. She was the daughter of M. Gibon, a Parisian pharmacist. Her father died when she was 17, and her mother withdrew her from the convent (where she was at school) to marry her to Marin Fenayrou, who was (as a qualified pharmacist) managing the business for the widow during the six months allowed by the French law. All seemed to go happily until 1875, when Fenayrou took Louis Aubert as assistant. He remained there for five years, and his relations with Madame Fenayrou created deadly enmity between the two men, which was heightened by Aubert's endeavours to obtain the business, that he had worked largely into his own hands. Fenayrou finally got rid of him in 1880, then sold the business and took a pharmacy in the Boulevard Malesherbes. Two years later he gave full vent to his hatred of Aubert by compelling his wife to invite him to their house at Chatau, and when he arrived he was attacked by Fenayrou; the fight was long and desperate, and towards the close, Gabrielle, called by her husband to his aid, held down Aubert while he received the *coup de grâce* from Fenayrou's hammer. The body was sunk in the river near by, but was found eleven days later. Fenayrou was condemned to death and his wife to penal servitude for life, but the Court of Cassation threw out the judgment for some legal informality. At a new trial "extenuating circumstances" tempered the jury's verdict of guilty, and the ex-pharmacist was shipped to New Caledonia, where, I believe, he died a few years ago.

Paris Society of Pharmacy.

WHEN I called at the headquarters of this Society the other day I found M. Bourquelot (Secretary) busily correcting proofs. "The circular-invitation to the centenary celebrations of our Society," he remarked, "has been drawn up by M. Lépinos, Secretary of the Centenary Fêtes Committee. You know M. Lépinos, of course; he has taken M. Yvon's well-known pharmacy, and he is one of our members who takes a very keen interest in the Society's history."

"You have three forms of invitation, I notice."

"Yes. We are inviting—(1) the President of each of the French Societies of Pharmacy, (2) the President of each principal foreign Society of Pharmacy, (3) our corresponding members (whom I should, perhaps, have put first). In this way we hope to have a really representative gathering. You understand that we are not asking for subscriptions to a public dinner; we are inviting our foreign associates (corresponding members) and the leaders of pharmacy the world over to come as the guests of our Society on this memorable occasion."

"And the programme?"

"As already announced; public meeting, and banquet. At the public meeting, I, as Secretary of the Society, give some account of our first gathering a hundred years ago and a few notes on our history since." (And M. Bourquelot pointed to some sheets of manuscript and a quaint volume, of which the pages were yellow with age.) "I have been consulting our archives, and have found some interesting details. Here, for instance, is a complete page of signatures of our founders in 1803."

"An historical relic."

"So much so that we think of having it photographed and published, with an account of our centenary meeting, and some portraits of our founders, &c., as a permanent memorial of 1803-1903."

M. Bourquelot was evidently as busy as usual, but he found time to chat over his excursion to England in 1899 for the British Association meeting at Dover and M. Léger's recent trip to London, and to express the hope that British and Irish pharmacy will be represented at Paris on October 17.

South African News.

(From our own Correspondents.)

MR. H. MAGNESS-ELGAR, of Cape Town, has borne his operation well, and is now convalescent.

NATAL NOTES.—The report of the Government chemist of Natal (Mr. E. Nevill) for the year 1902 states that during the last three years the analytical work sent to the laboratory has been rapidly increasing, and if this increase continues as it is doing it will be necessary to increase both the staff and building in order that it may be adequately dealt with. In 1900 the number of analyses made at the laboratory amounted to 339; in 1901, 387; and last year the cases had increased to 622. In the mining division coals, gold-reef, copper, lead, iron, and other ores, minerals, and samples of rock, limestone, and other miscellaneous substances were examined. For the Customs and Excise Department 31 analyses of spirits, beers, sugars, &c., were made during the year. Explosives, mainly gelignite and dynamite, were analysed for the Arms Department, and there were made 14 examinations of cases of poisoning or of suspected blood-stains for the Attorney-General. The Food and Drug Adulteration Act seems to have remains inoperative during last year, as no case of any kind under its provisions came to the laboratory.

Colonial and Foreign News.

OPIUM IN THE PHILIPPINES.—According to the New York *World*, the American Government has decided to sell to the highest bidder a monopoly of the sale of opium in the Philippines. The revenue so obtained will be devoted to educational purposes. The sale of the drug will be restricted to Chinamen.

MEDICINES FOR PORTUGAL.—A Government order has fixed a tax of 50 reis (about 3*l.*) on foreign specialties and foreign mineral waters, and one of 10 reis on home specialties. All pharmaceutical preparations bearing the name of a foreign maker or firm, and labels in a foreign language, are regarded as foreign.

JAPANESE ALCOHOL.—The Japan Alcohol Company, of Tokyo, has placed on the market a spirit extracted from maize grown in the Hokkaido district. The alcohol is said to be in no way inferior to imported alcohol, exceeding 90° proof. It is as yet too expensive to compete against the imported spirit—a fact which the German spirit-ring will be pleased to hear.

SULPHURIC ACID IN CANADA.—It is calculated that over 5,000,000 lbs. of sulphuric acid is used annually in the refining of Canadian petroleum, the greater part of which is supplied by Canada itself. Only a few concerns, however, are engaged in manufacturing sulphuric acid. The Lake Superior Power Company recovers the sulphur from smelting nickel ores, and uses it alone for manufacturing sulphite pulp. Across the line at Niagara Falls, New York, the Electric Lead Reduction Company is producing sulphuric

acid from the electrolytic treatment of galena, and, it is said, has proved a financial success.

GLASS-WORKERS STRIKE.—According to the United States Consul at Reichenberg, the unsatisfactory conditions in the cut-glass industry of Bohemia—more or less unsettled for years—have reached a climax in the strike of some 1,600 skilled cutters and finishers, now affecting some twenty manufacturing towns and villages, and threatening to involve the entire industry of the district. These workers are a peculiar class, frequently constituting the population of the village where a factory is located. Children begin to receive instruction at very early ages, and from about 6 years serve an exacting apprenticeship. A portion of this cutting and finishing work is done in the factories proper, where power and machines are furnished under varying conditions, which to a large extent are responsible for the discontent.

Pharmacy in the Balkans.

PUBLIC attention has of late been called to that quarter of Europe, so fertile in political eruptions, through which the Danube wends its course towards the Black Sea. A glance into the conditions under which pharmacy is practised there is timely. It must be borne in mind at the outset that pharmaceutical education in the region, in our sense of the term, is of recent date; the first model copied was France, but now there is a growing tendency to introduce the German methods, so far with great success, especially in matters of legislature. Pharmacy in Servia is supervised by a pharmacist attached to the sanitary department of the Ministry. Five years of practical work as apprentice and assistant are gone through, then the university diploma is obtained. The diplomas of Vienna, Graz, Budapest, Berlin, and St. Petersburg are also recognised as equal to that of Belgrade. The privilege of conducting pharmacies is granted by the State. In 1898 a petition was granted which fixed for every pharmacy in the towns at least 8,000, and in the country 6,000 souls. In granting licences, born Servians are first considered, then foreigners born in the country, next Slavs, and finally foreigners who have immigrated; but a foreigner who has obtained a licence must within a year become a subject of the King. On the death of the owner of a pharmacy, the widow until her death, or the children until of full age, may have the pharmacy conducted for their benefit. Prices are regulated by an obligatory tariff. Military pharmacy is very efficient in Servia, and has a special Pharmacopœia; one-third, however, of the military pharmacists are foreigners, mostly Austrians.

Bulgarian pharmacy conforms to the Russian-German fashion now. Under the Turkish dominion there were no pharmacies at all; after 1877 a few were opened in the larger towns by medical men. Now pharmacy is limited in the proportion of one shop to every 8,000 souls as a State concession, with the exception that a son, if already in possession of his diploma, may succeed his father in the business. Two revisions take place yearly. The Russian is the official Pharmacopœia. After a three years' apprenticeship the assistant's examination is passed before a doctor, a chemist, and a pharmacist. The diploma is obtained at a foreign university, the Russian one being preferred. Many Turkish medicine-men practise in the country.

The position of pharmacy in Roumania was so well sketched by Mr. Altan in his article printed in the *C. S. D.* of May 23, page 837, that all that need be said now is that the pharmacies there are licensed by the Government, one for 5,000 souls, but the owner is at liberty to sell the business, as the concession is his property. A licence is only granted to a Roumanian subject with a national diploma. In every pharmacy there must be with the owner at least one assistant. The law requires the pharmacist to give a discount of 30 per cent. on the Government tariff for medicaments delivered to insurance corporations, municipalities, or sick-aid societies. The Roumanian Pharmaceutical Society has also a successful business undertaking in the large Central Laboratory, which buys specialties and foreign chemicals, prepares galenicals, and does analyses. The profits go towards professional expenses and also into the pockets of the members.

Personalities.

MR. ERNEST A. UMNEY has returned home per *St. Paul* from New York, having completed his tour round the world.

MR. DAVID HOOPER, F.I.C., F.C.S. of the Indian Museum, Calcutta, leaves India this month for a holiday in the Old Country.

MR. MARCUS SPURWAY, of Messrs. Spurway & Co., essential-oil distillers and perfume-manufacturers, Cannes, and 184 Shaftesbury Avenue, W.C., is now in London.

"UBI CROOKES (crux) ibi lux" was the line placed under "Spy's" cartoon in *Vanity Fair* of May 21, so that Dr. Otto N. Witt's use of it shows his acquaintance with the English Press rather than original wit.

MR. J. S. NORTH, Cape Town (Vice-President of the Pharmaceutical Society of Cape Colony), is now on a visit to this country. Letters for him addressed to Lorimer & Co. (Limited), Britannia Row, London, N., will find him.

MR. F. L. TREMEER of the L.A.C., son of Mr. J. J. Tremeer, chemist, Barnstaple, won the 120 yards strangers' handicap at the Civil Service Athletic Sports at Stamford Bridge on June 13. There was a large number of competitors, and Mr. Tremeer, won the final by a couple of yards in 12 $\frac{3}{4}$ secs.

MR. WEISE, manager of the firm of Messrs. Ihmsen & Co., essential-oil manufacturers, Constantinople, has had the insignia of the fourth class of the Order of the Red Eagle conferred upon him by the German Emperor in recognition of his efforts for the promotion of German commerce in Turkey.

MR. T. R. PERKINS, chemist, Henley-in-Arden, has contributed another interesting article to the *Railway Magazine*—May and June. On this occasion he writes about the railway which was made, at a cost of 1,500,000*l.*, in the early sixties between Shrewsbury and Llan-y-Blodwl, in North Wales. It was opened on August 13, 1855, and, after a chequered career, was closed on June 22, 1880. An attempt was made in 1888 to resuscitate the derelict line, without success. The history of the railway is well told by Mr. Perkins, and railway-lovers will find in his admirably illustrated article food for reflection as to the future of railway-work in this country.

Birth.

WARDLEWORTH.—At Fern Nook, Magazines Lane, Liscard, on June 7, the wife of Mr. Theo. H. Wardleworth, F.L.S., of a son.

Marriages.

ATKINSON—GUY.—On June 17, at East Street Wesleyan Church, Southampton, by the Rev. J. Sidmouth Cooper, B.A., Wilfrid W. Atkinson, chemist and druggist, manager for Messrs. W. Bates & Co. (Limited), Shirley, to Miss Rosaline E. Guy, of Southampton.

DAVENPORT—WHATFORD.—On June 13, at St. Saviour's, Eastbourne, by the Vicar, the Rev. H. Uring-Whelpton, M.A., assisted by the Rev. Charles Crowden, D.D., and the Rev. J. M. Davenport, M.A. (uncle of the bridegroom), Horace John, elder son of Horace Davenport, of Rodbury, Surbiton, and 33 Great Russell Street, W.C., to Muriel, eldest daughter of J. Henry Whatford, of Highweek, and 6 Seaside Road, Eastbourne.

LENNOX—ELLIOT.—At Edinburgh on June 12, by the Rev. John Lennox, M.A., Lovedale (brother of the bridegroom), assisted by Rev. Alexander Aitken, Edinburgh, and Rev. James Gilmour, B.D., Cowdenbeath, James Lennox, chemist and druggist, Glasgow, to Mary, elder daughter of the late Robert Elliot, Whitrig, Berwickshire.

WILSON—WHITE.—At Morham, on June 10, by the Rev. J. M. Patullo, minister of the parish, William Potter Wilson, chemist and druggist, Haddington, to Flore Lambre, third daughter of the late James White, Tantallon Lodge, North Berwick.

Deaths.

CROSBIE.—At Misleton, Tettenhall Road, Wolverhampton, on June 11, Mr. Adolphe Crosbie, of Adolphe Crosbie (Limited), chemical-manufacturers, Wolverhampton.

LAIRD.—On June 9, at Limerick, Mr. John Laird, pharmaceutical chemist. Mr. Laird founded the business of John Laird & Co., 118 George Street, Limerick, over forty years ago. This business, from small beginnings, has steadily increased until it is now one of the largest medical establishments in the South of Ireland. Mr. Laird had not recently taken an active part in the business, owing to his long illness, so that the management remains as it has been for some time.

MARTIN.—On Saturday, June 13, at Ravenswood, Low Fell, Nannie, beloved wife of N. H. Martin, pharmaceutical chemist.

NEVINS.—On June 11, at 32 Princes Avenue, Liverpool, John Birbeck Nevins, M.D., M.R.C.S. Aged 85. Dr. Nevins was born at Leeds, and, after an apprenticeship to a local apothecary, came to Guy's Hospital, taking his M.R.C.S. in 1840, M.B. (Lond.) in 1841, and M.D. in 1846. In 1841 Dr. Nevins commenced practice in Leeds, but relinquished it the next year to take up the position of surgical tutor at Guy's. This post he held for two years, lecturing to the students during the winter sessions, and acting as surgeon to the summer expeditions of the Hudson Bay Company. In 1844 he was appointed lecturer on chemistry at the Liverpool Collegiate Institution, now the Liverpool College, and, in 1848, lecturer on botany, and afterwards on materia medica, at the Medical School. Dr. Nevins, as a medical man of the old school, has always identified himself with pharmacy. He published a translation of the London Pharmacopœia in 1851, but before that had published several papers of pharmaceutical interest. As early as 1845 he read a paper on the presence of a small percentage of mercuric oxide in blue pill and grey powder, before an evening meeting of the Pharmaceutical Society. Other papers were on cinchona and testing quinine disulphate, and on brucia as a test for nitric acid. In the last-mentioned paper he showed that Berthelot's test was very sensitive, but that iodic acid or potassium chlorate also gave the same colour-reaction. Dr. Nevins was an honorary member of the Liverpool Chemists' Association, and in 1894 gave some interesting reminiscences of his medical career in a lecture to the Students' Society. Dr. Nevins was interested in most branches of science and literature, and at one time or other filled the leading positions in Liverpool societies. As recently as the accession of King Edward VII. Dr. Nevins published in the *Transactions of the Liverpool Philosophical Society* an historical article on the Royal Arms. Biblical history also attracted him. Up to a few weeks ago he was engaged in completing his reminiscences of Liverpool, a work which is now in the press, and almost immediately afterwards collapsed, and had to take to his bed. He remained in a critical condition, gradually becoming weaker, until he passed quietly away last Thursday. He leaves two sons and a daughter, one of the former, Dr. John Ernest Nevins, being a well-known medical man in Liverpool.

PALIN.—At Sunderland, on June 3, Mr. John Frederick Palin, chemist and druggist. Aged 69.

STEPHENS.—At 7 Beaumont Road, Plymouth, on June 10, Mr. Jonathan Stephens, chemist and druggist, formerly of Fore Street, Devonport. Aged 49. Mr. Stephens was with Messrs. Chas. Row & Son, of Devonport, for fourteen years, and afterwards engaged in business on his own account in the same town for twenty years.

WILSON.—At 44 South Clerk Street, Edinburgh, on June 14, Ann Lyon, wife of Mr. James Wilson, pharmaceutical chemist, 116 Nicolson Street, Edinburgh. Aged 82.

The exports of olive oil from Seville during 1902 amounted to 6,934 tons, against 2,943 tons in 1901 and 2,534 tons in 1900.

DR. R. T. HEWLETT shows in the *British Medical Journal* that oysters from waters uncontaminated with sewage do not normally contain the colon or allied bacilli, or the bacillus enteritidis sporogenes.

Trade Notes.

MESSRS. HOWARDS & SONS close their factories and warehouses at Stratford and Ilford on Saturday, June 20, for their annual holiday.

SANOSIN, to which reference was made in this column last week, is also supplied by Messrs. Thomas Christy & Co., 4, 10, and 12 Old Swan Lane, Upper Thames Street, E.C.

MESSRS. ALLEN & HANBURY (LIMITED) announce that their offices, factories, and warehouses at Bethnal Green, E., will be closed for stocktaking from June 24 from 27 inclusive.

BOVRIL (LIMITED) intimate that in all probability they will repeat the bonus picture scheme next season, and that the coupons on all bottles in stock when the present scheme closes will be allowed to rank then.

MALTOVA (LIMITED) find it necessary to warn pharmacists that imitations of their product are being offered under names that are similar. Our subscribers will, we feel sure, note the fact.

MESSRS. JOSEPH & JOHN VICKERS & Co. (LIMITED), distillers of rectified and methylated spirit, Victoria Distillery, Fulham, S.W., intimate that their telephone number is now "121 Western" instead of "410 Kensington."

MELLIN'S FOOD (LIMITED), writing in regard to our report of the last meeting of the London Chemists' Association (*C. & D.*, June 6, page 914), ask us to state that 10 per cent. is the minimum profit to the retailer under their anti-cutting agreement.

THE Aetien-Gesellschaft für Chemische Industrie, Rheinau, near Mannheim, Germany, has been purchased by the Berlin house of Messrs. Kunheim & Co., and will in future be carried on under the style of Kunheim & Co., Rheinau. The firm will be represented in London by Messrs. A. & M. Zimmermann, 3 Lloyd's Avenue, E.C.

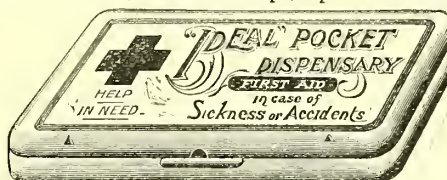
SOLIDIFIED ALCOHOL.—One of the neatest portable forms of denatured alcohol for heating-purposes that we have seen is sold in Germany. It is in the form of cubes, which resemble jubes. The cubes are tinted a pale-blue colour, and have the odour of amyl acetate. A tin containing about three dozen 15-gr. cubes retails at 6*d.*, so that the spirit is rather dear. The cubes burn with a little spurting, but they leave little residue. We do not know who the makers are.

THE POSTCARD CRAZE has invaded the photographic world sufficiently to demand the provision of a special printing-frame. Messrs. Geo. Houghton & Son (Limited), 88 and 89 High Holborn, W.C., are putting on the market this week the "Marriott" postcard printing-frame which is intended to simplify the operation and should be a good line for photographic chemists. The frame is made in three sizes, adapted to negatives $3\frac{1}{2}$ by $2\frac{1}{2}$, $4\frac{1}{4}$ by $3\frac{1}{4}$, and 5 by 4 inches, and selling at 7*d.* and 10*d.*

SULPHUR-AND-SARSAPARILLA HEALTH SALT that actually contains the essential ingredients is now put on the market by Messrs. Woolleys (Limited), Blackburn. The salt is put up in attractive decorated tins, and a teaspoonful of it forms, with half a tumblerful of water, a brown beverage with a creamy head, the drink more resembling a draught of home-brewed beer than one of saline. The salt is a table-beverage rather than a medicine, and there should be a good sale for it. The makers tell us that they make a speciality of ext. sarsaparilla, and will send samples and prices to any of our subscribers—a remark that also applies to the health salt.

SOLUBLE MANGANESE SALTS.—It will be remembered that at the Dublin meeting of the British Pharmaceutical Conference Dr. F. B. Power communicated from the Wellcome Chemical-research Laboratories a paper on soluble manganese citrate, soluble manganese and iron citrate, and soluble manganese and iron phosphate. These salts have now been placed on the market by Messrs. Burroughs Wellcome & Co. Manganese salts are used in the treatment of anemia, and in soluble form will probably supersede the older and more or less insoluble salts on account of superiority. The "Wellcome" brand are scale preparations, and are put up in 1-oz. and 4-oz. bottles, and also in tabloid form.

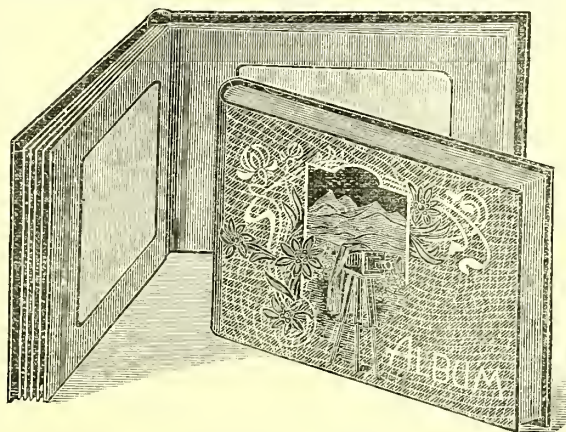
"IDEAL" POCKET-DISPENSARY.—In a metal box 4 inches long by $1\frac{1}{2}$ inches wide and $\frac{1}{2}$ inch deep, Messrs. W. Thursky & Co., 49 Newgate Street, E.C., have succeeded in getting a selection of remedies and appliances that constitute first aid in case of sickness or accidents. There are vaseline, ammonia solution, valerian drops, spirit of ether, lint,



plaster, a bandage, &c., and the whole retails at 1*s.* Show-cards are supplied, upon which one of the boxes can be shown, and so attract buyers. A figure of the "Ideal" (much reduced) is given above, and the firm inform us that for colonial and export trade they are arranging for larger sizes.

BRUSHWARE, SUNDRIES, AND PHOTOGRAPHY.—A new edition of the wholesale price-list of the products of Messrs. G. B. Kent & Sons (Limited), of 75 Farringdon Street, E.C., has been issued, which every chemist ought to possess. It is well printed and profusely illustrated, brushes, of course, taking up seventy-seven out of the one hundred pages. The "Kent" brushes need no commendation (they have lived too long for that), but there are many other articles in the "sundry" line included in the list that warrant attention. The photographic department is developing largely, and toilet-ware, dressing-combs, &c., are given special prominence. Since the list was compiled in May indiarubber combs have advanced, and a sheet of revised prices is inserted. The "Catalogue of Best British Brushes" for 1903 is one-third larger than its immediate predecessor.

PHOTOGRAPH ALBUMS.—We have this week inspected a variety of photograph albums stocked by Messrs F. A. Horle & Co., 8 St. John's Lane, E.C. The selection includes albums to sell at from 3*s.* to 2*s.* 6*d.* Each book being neatly bound either in cloth or buckram, different classes of trade



can thus be catered for. The illustration shows the design on the cover of one series, the covers being produced in several colours. The mounts employed are in "art" colours, and, as a rule, are arranged for slipping in photographs. A detailed list of these goods, with particulars of the sizes, is published, and photographic chemists can obtain it on application. A photo-collecting box with loose leaves is, at present, a good selling line.

LISTERINE has been investigated by two members of the Association of Analytical Chemists of the Pasteur Institute (Paris). Listerine is a mixture of the essential oils of thyme, eucalyptus, baptisia, willow, and mint. It has relatively non-toxic properties peculiar to these oils, but the Parisian savants have brought out the important fact that the mixture of oils is much more potent than any one of them singly. It attacks more than one joint in the bacterial armour. Carbolic acid—used so much mainly because it is the original antiseptic employed by Lister—is 146 times as toxic as listerine.—*Daily Chronicle*.

Association Affairs.

Stockport Chemists' Association.

THE last meeting of the session was held at the County Restaurant, Stockport, on June 10, Mr. W. Dodge in the chair. It was agreed that a letter of condolence and sympathy be sent to the widow of the late Mr. Verdon. It was proposed by Mr. ORTON that Messrs. Arnfield, Bennett, Dodge, Wilson, and the Secretary compose an Executive Committee, to be called in cases of emergency. This was seconded by Mr. WOLSTENHOLME, and carried *nem. con.* The next meeting is to be on the first Wednesday evening in October.

Edinburgh Chemists', Assistants', and Apprentices' Association.

A SUMMER MEETING of the Association was held at 36 York Place, Edinburgh, on Friday, June 12, Mr. A. E. Kelly (Vice-President) in the chair. The evening was devoted to a study of fresh plants, of which a large collection had been provided by Mr. C. A. MacPherson, from the Water of Leith district; by Mr. A. E. Kelly, from Braidburn district, and by the President (Mr. Archibald Currie). The PRESIDENT gave an interesting and exhaustive explanation and practical demonstration on all the specimens, which were arranged on tables in accordance with the classes and orders, as in Bentham's 'British Flora.' On the motion of the CHAIRMAN a cordial vote of thanks was awarded to Mr. Currie.

West Ham Chemists' Association.

A MEETING of this Association was held at the Earlham Hall, Forest Gate, on June 11, Mr. Harold Mitchell in the chair. There were also present Messrs. Parker, Soper, Bessell, Hider, White, Forbes, Matthews, Reed, Johnson, Barnes, Eastman, Cleland, Jones, and Gwinn (Hon. Secretary). The HON. SECRETARY reported that a letter had been received from Mr. G. F. Merson, the Hon. Secretary and Treasurer of the Federation of Local Pharmaceutical Associations, suggesting that the West Ham Association should become affiliated. The Early Closing Association wrote acknowledging the receipt of a cheque and expressing thanks for same. The correspondence between the Hon. Secretary and Boots (Limited) was then read, in which the company promised to close their branches in Leyton, Leytonstone, and Stratford in conjunction with the chemists in these districts from 2 o'clock on Thursdays. Mr. Glyn-Jones has promised an address on December 10, and Mr. J. H. MATTHEWS reported on his visits to Chigwell and Chingford in search of headquarters for the summer outing arranged for July 9. It was finally decided to meet at the King's Oak, Chingford, at 5.30 for tea. Times of trains and tickets will be sent by the Secretary, and members wishing to be present are asked to hand in their names as soon as possible. Friends of members will also be heartily welcomed. The report of the Syllabus Committee was presented by the Chairman and approved, a copy of the syllabus being handed to each member. The HON. SECRETARY presented his report on the early closing in Leyton and Leytonstone, and pointed out that all the chemists had agreed to close with one exception, and that was where a post-office was attached to the business, but if the G.P.O. sanctioned it this business would close with the others at 2 o'clock on Thursdays. Mr. MORGAN-JONES proposed, and Mr. FORBES seconded, that

The W. H. and D. C. A. be affiliated to the Federation of Local Pharmaceutical Associations, and the suggestions of Mr. Merson be adopted,

and the motion was carried *nem. con.*

The Hartlepool Chemists' Association.

THE inaugural meeting of this Association was held on Wednesday, June 10, at Watson's Café, Lynn Street, West Hartlepool. Alderman Thos. Clarkson, J.P., presided, and amongst those present were Messrs. G. F. Merson and

T. Maltby Clague (Newcastle), Thompson and Lee (Middlesbrough), Robinson (Darlington), Cross (Wingate), J. A. Turnbull, L.D.S. (West Hartlepool), Denton and Buckle (Hartlepool), G. A. Watt, G. S. Gibson, T. Levie, G. R. Troupe, J. C. Winn, J. B. Barker, A. Timmins and F. G. Rawson (West Hartlepool). Several apologies were read from gentlemen who are to support the Association.

The rules of the Association as drawn up by the committee were adopted, several new members were elected, and the following officers were appointed:

President.—Alderman Thomas Clarkson, J.P.

Vice-Presidents.—Alderman J. Horsley, J.P. (Hartlepool) and Mr. G. A. Watt (West Hartlepool).

Hon. Vice-Presidents.—Mr. Edward Evans, jun. (Liverpool); Dr. A. E. Morison, Dr. S. Biggart, Dr. A. V. MacGregor, Mr. P. R. Gibson, L.D.S., and Mr. J. A. Turnbull, L.D.S. (West Hartlepool), and Dr. Scott Gibb (Hartlepool).

Executive Committee.—Messrs. R. Leithead, J. B. Barker, G. S. Gibson, and J. Hill (West Hartlepool), H. Buckle, and J. G. Denton (Hartlepool).

Hon. Secretary and Treasurer.—Mr. A. Timmins (West Hartlepool).

The Chairman extended a cordial welcome to visitors, and mentioned that the Association now comprises, with one exception, the whole of the registered chemists and druggists in business in the two Hartlepoos.

Mr. G. F. MERSON afterwards addressed the meeting, and spoke of the advantages of local associations, and of the Federation, which now includes about forty local associations. As to any definite programme for the Association's work, he thought it advisable that the needs of the district should be of first importance. He thought they would find matters crop up from time to time without laying down any definite programme for a session. He particularly impressed upon the meeting the importance of cultivating the social element, especially in the early stages of their existence, as this does more than anything else to break down those little feelings of animosity which so frequently exist. He also considered it advisable that they should arrange an annual picnic and if possible an annual dinner, also in the winter season an occasional smoking-concert. He believed the North of England to be the best-organised district in the country—(cheers)—and proceeded to mention the various towns and districts in which chemists' associations already exist. Mr. Merson proceeded to show how associations of chemists can best act together in regard to questions of the day, and in furthering the interests of the national pharmaceutical bodies, also speaking about some of the Pharmaceutical Society's internal problems, such as territorial representation.

Mr. T. MALTBY CLAGUE followed with an interesting and amusing speech, in which he emphasised most of Mr. Merson's remarks. The CHAIRMAN proposed a hearty vote of thanks to Messrs. Merson and Clague, which was seconded by Mr. G. A. WATT, and supported by Messrs. BUCKLE, BARKER, and F. G. RAWSON, and duly acknowledged. The meeting then terminated.

Sheffield Pharmaceutical and Chemical Society.

A MEETING of the chemists of Sheffield was held at the Montgomery Hall on Tuesday evening, June 16, to make arrangements for the official invitation to be given the British Pharmaceutical Conference to visit Sheffield in 1904. Mr. G. T. W. NEWSHOLME moved that Mr. Councillor A. R. Fox take the chair, which was seconded by Mr. G. SQUIRE, and carried. He was supported by Messrs. Newsholme, C. F. Carr, G. Squire, J. B. Pater, G. Ellinor, R. Tildesley, F. W. Whitworth, J. Gilbert Jackson, F. A. Upsher-Smith, J. Evans, and H. Antcliffe. Letters of apology for non-attendance were read from Messrs. J. M. Furness, J.P., P. Carr, J. A. George, and J. W. Lofthouse.

Mr. NEWSHOLME outlined the experience of the working of the Conference when it visited Sheffield twenty-five years ago.

Mr. G. SQUIRE formally moved that the Conference be invited to Sheffield in 1904, which was seconded by Mr. J. GILBERT JACKSON, and supported by Mr. J. UPSHER-SMITH and Mr. G. ELLINOR, and carried unanimously. It was proposed by the CHAIRMAN that Mr. Newsholme be asked

to tender the invitation at the coming Conference at Bristol, which was seconded by Mr. ANTCLIFFE, and carried. Mr. J. B. PATER moved that Messrs. A. R. Fox and G. Squire be asked to support Mr. Newsholme, which was seconded by M. C. F. CARR, and carried.

Mr. NEWSHOLME moved that the following be named as delegates to the conference at Bristol on July 27—viz.: Messrs. Newsholme, A. R. Fox, G. Squire, H. Antcliffe, and F. A. Upsher-Smith.

A vote of thanks to Mr. Fox for presiding concluded the business.

Grimsby Chemists' Association.

A GENERAL MEETING of this Association was held at the Oberon Hotel, Grimsby, on June 16, Mr. C. WILLSON presiding over a small attendance. The SECRETARY (Mr. H. W. Colley) reported that he had sent a letter of condolence to the widow of the late Mr. T. C. Palmer expressing the sympathy of the Association. The rules of the Federation of Local Associations were then discussed, and several suggestions were offered, the Secretary being instructed to send them to the Federation. The Vice-President and the Secretary were appointed delegates to the British Pharmaceutical Conference and the annual meeting of the Federation at Bristol in July. Mr. Johnson was elected a member of the Council in the place of the late Mr. T. C. Palmer. It was stated that the Grimsby Chamber of Commerce had refused to consider a petition from Mr. Dobbs on the question of alteration in the Poison Laws, considering that the facilities for obtaining such articles were already quite sufficient in Grimsby and district. The alteration in the reading of the Stamp Act was then discussed, specimens of labels being shown.

Chemical Society.

THE last ordinary meeting of this Society for the present session was held on Wednesday afternoon, June 17, when the chair was taken by the President, Professor Tilden, F.R.S.

PRESENTATION OF THE LONGSTAFF MEDAL.

After the formal admission of new Fellows, the President presented the Longstaff medal to Professor W. J. Pope, F.R.S., and, as is the custom on occasions of this kind, he gave a short historical account of the recipient's researches, which, it will be remembered, have resulted in the extension of the conception of stereochemistry, previously confined to derivatives of carbon, to compounds of nitrogen, tin, sulphur, and selenium. Professor Pope, in his reply, gave expression to his feeling of indebtedness to the Research Fund of the Chemical Society and to his former teacher, Dr. Armstrong, who had first induced him to undertake original research. At this stage Dr. Longstaff, son of the founder of the medal, was called upon, and in the course of his remarks pointed out the peculiar appropriateness of the Council's award of the medal to a chemist who had so greatly extended our knowledge of the disposition of atoms in molecules in the year of the centenary celebration of the genesis of the atomic theory. The first paper contributed was on

THE ELECTROLYTIC DETECTION OF ARSENIC,

and was read by Dr. Thorpe, F.R.S. This work was the outcome to some extent of the deliberations of a special committee appointed by the Board of Inland Revenue to investigate the methods available for the detection of arsenic in beer and brewing materials. The simple Marsh-Berzelius method was first experimented with, but the difficulty of obtaining sensitive, arsenic-free zinc, and the impossibility of procuring sulphuric acid free from arsenic, led to its abandonment. The electrolytic apparatus consists of a small porous pot of unglazed Berlin porcelain fitted with a glass-stoppered cover carrying the exit tube, and from which there hangs by a platinum wire a stout conical platinum electrode, dipping into the liquid to be tested. The porous pot stands in a shallow beaker containing dilute sulphuric

acid. The apparatus is connected to a rheostat to enable current from the main to be used. The tubes are of the usual form, and constructed of Jena glass. The amount of arsenic is estimated by comparison with standard films produced under similar conditions. The method is, however, not available for arsenic acid without previous reduction of this to the arsenious state.

In the discussion which followed Dr. Thorne and Mr. Ling expressed satisfaction that there is at last a prospect of being able to test for small quantities of arsenic without the preliminary operation of preparing pure zinc. Mr. Thompson, who has had some experience with the electrolytic method, stated that with platinum electrodes the arsenic-films are, for the same amount of arsenic, less dense than those obtained in Marsh's test with zinc. He has found lead electrodes better than platinum in this respect, but it is difficult to procure the former metal in an arsenic-free condition.

Dr. Thorpe's second paper dealt with the detection of arsenic in fuel, and described a method of burning the fuel in a closed tube in excess of oxygen, the residual ash and sublimate (if any) being subsequently distilled with hydrochloric acid and a little bromine, the distillate being collected and examined by the electrolytic method already described.

THE CRYSTALLINE FORM OF AMMONIUM SULPHATE

was the title of the next paper; it was contributed by Dr. A. E. Tutton, and showed that whilst the molecular properties of ammonium sulphate crystals—*e.g.*, refractive index, molecular volume, &c.—are very similar to those of rubidium sulphate crystals, their specific properties are quite different. This implies, among other things, that the 10 atoms of two ammonium molecules occupy about the same space as 2 atoms of rubidium, but the author did not indulge in any speculations as to the reason of this.

During the course of the meeting a ballot was held. Among the candidates elected were the following: Messrs. H. J. Aubrey, M.P.S., G. Barger, B.A., B.Sc., of the Wellcome Research Laboratories, and C. D. Bibby, of Parke, Davis & Co.'s laboratories.

An extraordinary meeting of the Society will be held at 6 P.M. on Thursday, July 2, to consider certain small changes in the by-laws relating to payment of subscriptions.

American Notes.

MESSRS. PARKE, DAVIS & Co., of Detroit and Walkerville, have begun the erection of another laboratory in addition to their already large plant. The new building will be four storeys and a basement in height, 470 feet long by 60 feet wide, and will stand upon the corner of McDougall Avenue and Atwater Street, in Detroit.

INDIGO IMPORTS.—In former years the importation of indigo from India averaged about 2,000,000 lbs., representing over 50 per cent. of the total importation into the United States, the chief ports of entry being New York and Boston. During 1902 the importation from India at New York was reduced to 239,500 lbs. during the first six months, valued at 30,600 $\frac{1}{2}$., and ceased entirely after the month of June. The cause is, no doubt, the impossibility of maintaining competition with the synthetic product.

THE BOARD ACTIVE.—The New York Board of Pharmacy, according to the *New York Commercial*, is making war upon substitutions (whatever those may be) on the part of retail druggists. The Bostwick Bill has been vetoed by the Governor, and therefore failed to become a law, but it has called attention to the existing laws against substitution, and it is claimed that these are being violated. The Board of Pharmacy is making a careful investigation of the matter, and those violating the law will be punished as soon as discovered. The understanding relative to the labelling of poisons, which was insisted upon by the Board of Pharmacy, in compliance with the existing law on the subject, is said to be in a fair way for adjustment, a list of medicines to be labelled having been compiled by the druggists, which they expect the Board of Pharmacy to approve.

Legal Reports.

Trade Law.

Canvassers or Pedlars?—At Halifax, on June 6, Alice Kitchenman and Adelaide Dormer were summoned for "acting as pedlars without certificate at Elland on May 29." It was stated that the defendants were canvassers, going from house to house at Elland with tablets of soap. At each house they handed a tablet, along with a bill, which stated that the bill would be called for next day, when inquiries would be made as to whether the recipients would buy the tablet of soap or not. At some houses, however, they sold the soap "straight off," and therefore acted as pedlars. A technical offence was admitted, and each defendant was fined 5s.

Pharmacy Act, 1868.

ALEX CROSS & SONS (LIMITED) FINED.

JUDGMENT was given in the Glasgow Sheriff Court on Saturday last in the prosecution, at the instance of the Pharmaceutical Society, against Alex Cross & Sons (Limited), Glasgow, for having sold a bottle of ant-detonator containing arsenic, without observing the provisions of Section 17 of the Pharmacy Act, 1868.

In giving his judgment, Sheriff Davidson said: The first defence offered on behalf of the respondents is that the prosecution-title has not been proved. The prosecutor is described as "Richard Bremridge, Registrar under the Pharmacy Acts, 1852 and 1863, in name and by the authority of the Council of the Pharmaceutical Society of Great Britain." When the relevancy of this complaint was argued, I decided, on the authority of *Bremridge v. Steele Smith* (reported in Vol. 33, "Scottish Law Reports"), that a person so described is entitled to prosecute such a charge as that preferred. All that the complainer has failed in, therefore, is to supply the link identifying Richard Bremridge with the Registrar under the Pharmacy Acts. That the Registrar has authority, assuming that my view of the law is correct, is a matter of statute and therefore of public knowledge, and he had the right to appear by an agent, under a provision of the Summary Jurisdiction Act. I consider the Court is entitled to assume that the name of the person who appeared as prosecutor is, in point of fact, the name of the prosecutor, when the fact is not questioned by the respondent in the course of the evidence. Therefore I cannot sustain the objection. To go into the merits of the case, I consider it quite clear on the evidence adduced that the respondents contravened Section 17 of the Pharmacy Act, 1868, in every one of the three instances libelled. That the mixture sold was arsenical poison does not admit of doubt; and although it was not sold as a medicine, nor as an article of diet, it is obviously in the catalogue of articles which public policy had decided to restrict the sale of by the Act of 1863. If this view is correct, there is practically no defence to the charges of selling to a stranger, and failing to enter the sale in a book or register, as directed by the Act. The failure to fix the name and address of the vendor is, to my mind, also quite clear. The Act does not mention that the seal of the bottle is a place on which the name may be placed, and for a very good reason. The bottle cannot be used until it is uncorked, and it cannot be uncorked without destroying the seal. Therefore, if the name is only on the seal it must be obliterated, and thus is abandoned any check or security which attaches to the retention of the name of the vendor before the article can be used. As the word "contravention" was used in the complaint, whereas three contraventions were libelled, I think that respondents are entitled to absolvitor if they have succeeded in showing that any one of the provisions has not been contravened. As they have not done so, I find them guilty of the contravention first named—namely, the sale of poison to a person unknown to them.

His Lordship imposed a penalty of 5% with 3% expenses. Mr. J. D. Campbell, for respondents, asked his Lordship to state a case, and he assented.

ANOTHER GLASGOW PROSECUTION.

ANOTHER prosecution of considerable interest, at the instance of the Pharmaceutical Society, will be disposed of

in the Glasgow Sheriff Court next month. Mr. Bremridge, Registrar to the Society, has summoned an East End druggist for an alleged offence against the Pharmacy Act. The summons is against Mr. Thomas C. Paterson, 231 Duke Street, Glasgow, who is cited to appear before Sheriff Davidson on July 22 to answer a charge of contravening Sections 1 and 15 of the Pharmacy Act of 1863 by "keeping an open shop for the retailing, dispensing, or compounding of poisons, he not being a duly registered pharmaceutical chemist."

County Court Cases.

CO-OPERATIVE COMPETITION.

IN the case of the Sales Company (Limited) v. the Northern Co-operative Company heard by Sheriff Reid at Aberdeen (see *C. & D.*, June 13, page 933), it was sought to prove that the payment of dividends to the defendants' customers was an infringement of an anti cutting agreement between the parties.

Mr. John Munro, solicitor, who appeared for the Co-operative Company, said the defendants sold the soap at 2½d. a bar, the agreed-upon price, and gave a check for the amount of the sale. He did not think it could be contemplated that this was to be looked upon as a contravention of the agreement, because it was notorious that co-operative companies all carried on their business in this way, and the plaintiffs, when they entered into the bargain, must have known perfectly well that the Co-operative Company gave checks to all their customers.

The Sheriff: What is the object of this agreement on the part of pursuers?

Mr. Ewan (for the plaintiffs): To prevent any retail dealer underselling another. Each retail dealer is bound to sell at a certain minimum price. They can go as far above it as they like, but on no account are they to go below it. I submit that the giving of the check is discount, bonus, or allowance, and it is immediately realisable.

The Sheriff: How are your clients prejudiced? How do they suffer?

Mr. Ewan: In this way: that the company, in giving a check, are selling below our minimum price, and the sales of the ordinary retail dealers have been going down steadily in consequence.

The Sheriff: I don't at this moment see how you suffer damage.

Mr. Ewan: If this soap is undersold by the Co-operative Company, each retailer is prevented from selling at the same price as the Co-operative Company, and therefore the sales go down accordingly. The ordinary retailer refuses to take our soap in consequence of this undercutting. Apart from that, I stand upon the agreement that they have undertaken not to sell below a certain price, and if they break that agreement my soap must of necessity suffer damage in respect of my sales. Take one instance in Aberdeen, where tons were formerly sold, we are now only selling pounds.

In the course of further argument the Sheriff said that though it might not be possible to estimate the value of the dividend on 2½d. in coin, the check for 2½d. was still of value.

Mr. Munro said the dividend was a share of the profit on the whole overturn for a year. They might be selling the soap at a loss. The Sheriff remarked that the action seemed rather a suicidal policy, and Mr. Munro said it was a case of the other grocers being jealous of the Co-operative.

The Sheriff reserved judgment, and gave it on Thursday, June 11, dismissing the action, with expenses. He said the essential feature of the agreement which had been come to by the parties was that the price was not to be broken, and it had been pleaded on behalf of the Co-operative Company that it was notorious that they gave checks for dividend on every sale, and the question that arose for decision was whether this giving of checks was a breaking of the price. He was very clearly of opinion that it was not; and added that if the agreement had been entered into as contended by the pursuers, it would not have been binding upon the Co-operative Company, because it was against the essential principles of their constitution to sell anything without giving a check, and that the agreement having been entered into would be reducible at the

instance of any shareholder of the company, and in consequence this might be pleaded by way of exception in court.

PENALTIES UNDER THE PHARMACY ACT.

At the Bradford County Court on Tuesday, June 16, before Judge Bompas, K.C., Mr. Dawson (Messrs. Beldon & Aekroyd) applied for an order of attachment against Novello Denham, an unqualified chemist's assistant, for non-payment of a penalty. Mr. J. T. Last appeared for the defendant.

Mr. Dawson said the Pharmaceutical Society got judgment against the defendant on March 3 for a penalty of 5*l.* under the Pharmacy Act, and he had since mentioned the matter of the non-payment to his Honour, who had suggested that notice should be given to the defendant and his solicitor, and that the matter should be argued before him. He pointed out that the Pharmaceutical Society is entrusted with the duty of enforcing penalties in such cases, and submitted that the proceedings were of a quasi-criminal character, and therefore his Honour had power to commit a person to prison without their proving that he had means to pay. It is important that the County Court Judge should have this power, because in certain cases shops are held by limited companies, and unqualified persons are employed for the sale of poisons, and in these cases they could not enforce the law if his Honour had not this power, because a limited company might have apprentices in the shop who had no means, as in the case of the present defendant. The Debtors Act of 1869, which took away from County Courts the power to commit persons to prison without proof of means, made exceptions by Section 4, which covered this case, and left the former power remaining with regard to the payment of penalties and sums in the nature of penalties. The Act under which the penalty was recovered was the Pharmacy Act, 1868, Section 15. His view of the power of the Judge was upheld by the judgment in the case of *Ex parte Martin*, which afterwards went to the Court of Appeal as *Martin v. Bannister*.

Mr. Last said that in this case he held that his friend's action was altogether misconceived. The Debtors Act did not apply to the defendant in this motion, who is an apprentice youth receiving 2*s.* a week.

His Honour pointed out that it was not suggested that the Debtors Act gave him the power. What was held was that the Debtors Act does not deprive him of the power in this case. He scarcely remembered how one used to commit persons to prison straight off before the Debtors Act, but that former power certainly applied to infants as much as to anybody else. What he had to consider, it appeared to him, was what he ought to do, just as if the Debtors Act had never been passed. In those old days, as far as he remembered, people did not apply to the Court for the arrest of a man, but went to the office, took out an order for arrest, and went straight away and executed it. He did not know, therefore, that in a case which was not affected by the Debtors Act it was necessary for him to give an order. He supposed he might give directions—directions being asked for in the second part of the application—that they had only to go to the Registrar, and ask him for an order-form, and upon that go and take the respondent. He could not, at the moment, see why the Pharmaceutical Society should not, as a matter of course, issue a writ of *capias ad satisfaciendum*, and go to the Registrar and tell him to do that at his peril and take the man up, and then what would be the result of taking him up remained to be seen. He did not know at the moment whether there was any difficulty in issuing a writ of *capias ad satisfaciendum*, but, so far as he knew, that having been done, the defendant might stop in prison all his life long unless he either paid the 5*l.* or became bankrupt. He thought there was a special provision that after six months he might become bankrupt.

Mr. Dawson said he was afraid the Registrar would not issue a writ of *capias ad satisfaciendum*.

His Honour: What right has the Registrar to refuse a *ca. sa.*?

Mr. Dawson said the Registrar might object that his Honour had not made any order.

His Honour said that in such case he supposed the Society might immediately bring an action against the Registrar for default of duty, or might go for a mandamus on him to issue a *ca. sa.*; but if they issued a *ca. sa.*, and seized the

man, then if he (his Honour) was wrong the man would probably have a cause of action against them, and then they would get the point tried and settled. He did not see any way out of that position. He was asked to go back to the year 1868. Suppose that action had been brought in 1868, what would the Society have done? Would they not as a matter of everyday practice—and never have thought of doing anything else—have gone and issued a *ca. sa.*?

Mr. Dawson said he thought that even then they would have had to obtain an order of the Judge, because the power of arrest was limited; and if he went to the Registrar to-day the Registrar would say that he could not issue it because he had no power, and he would have to come before his Honour again. It appeared to him that his Honour had two methods of enabling the Society to enforce the judgment otherwise than by distraint—either by attachment or by writ of judgment summons; and what he asked for was that his Honour would give him such directions that he could comply with Order 25, and serve the order upon the defendant, and then they could come to that court again.

Mr. Last held that his Honour was not under the necessity to give any such directions.

His Honour: What do you suggest the Society should do?

Mr. Last replied that it was not for him to suggest, and it was scarcely for his Honour to advise, what the Pharmaceutical Society should do. It was a matter between the Registrar and the Society.

Mr. Dawson said it was quite a friendly matter between the Registrar and himself, and the Registrar had suggested that he should go to the Judge.

His Honour said that he could not agree with Mr. Last's contention that he should not advise. A Court could not be carried on unless the Judge could be applied to for advice and directions, and he should certainly hold that he had the power to give directions to the Registrar to do what he thought he ought to do; but at present he did not feel that he ought to give directions in this matter. He had not looked into all the rules, and it might be that there was some other rule which said that the County Court could not issue a *ca. sa.* He should have to look into the matter.

Mr. Last suggested that if the *ca. sa.* had still been in use they would have been able to find modern instances, and he believed that there were only two means to-day of procedure for arrest—one by a commitment summons under the Debtors Act and the other by writ of attachment.

His Honour said that the want of modern instances did not prove anything, and he did not know of anything which had put an end to the writ of *ca. sa.* He would, therefore, reserve his judgment on the application.

Medicine-stamp Acts.

NEITHER LICENCE NOR STAMPS.

At Burnley on June 15, Thomas Houlgrave, described as an ointment-seller, of 65 Ingham Street, Padiham, was summoned for selling medicines without an Exeise licence, and also for exposing for sale a box of ointment unstamped.

Mr. Simpson, of the Solicitors' Department, Somerset House, who prosecuted, said the offence consisted of having "held out or recommended to the public by the makers, vendors, or traders thereof, such nostrums or proprietary medicines as specifics." In this case the medicines were held out (by words written on a card) to be beneficial for the cure or relief of certain ailments affecting the human body—viz., "cuts, burns, scalds, piles, scurvy, chapped hands, tender feet, and all skin diseases." The medicine was called "Household Ointment," and was prepared by Houlgrave. Evidence having been given of the purchase of six boxes of the ointment (which were unstamped) by an Inland Revenue officer, defendant was fined 2*l.* and costs.

Sale of Food and Drugs Acts.

BLUE PILLS.

ON June 13, at the Reigate County Bench, Mr. W. P. Little, chemist and druggist, and Mr. Geo. Crawford, chemist and druggist, trading as Little & Crawford at Horley, were summoned for selling blue pills which were not of the nature, substance, and quality demanded. Mr. Talbot Kyle,

County Council weights and measures inspector, prosecuted, and Mr. Cyril H. Kirby (Neve, Beck & Kirby) defended.

Mr. Kirby admitted the sale, but asked for an adjournment in order to have an analysis from Somerset House.

Formal evidence was then given by Frank Hampshire, assistant to Mr. Kyle, who stated that he visited the defendants' shop and saw Mr. Crawford. He asked for a 1s. box of blue pills. Mr. Crawford said, "What size will you have? Will 3 gr. do?" Witness replied, "Yes," and Mr. Crawford gave him the box produced.

The certificate of the analyst read as follows: Pill-mass—mercury in each pill 0.50, percentage 13.44; vegetable matter 1.87, percentage 50.82; coating 1.32, percentage 35.77; total in gr. 3.69, percentage 100.01. The percentage of mercury in the pill-mass (excluding the coating) is 20.8, instead of 33.3, as ordered in the blue pill of the B.P. Deficiency of mercury, 12.5 per cent.

Mr. Kirby said his clients were not at all satisfied with the analysis as submitted by the prosecution, and until he received the result of the analysis from Somerset House he could not proceed with the case.

Mr. Hudson (one of the Magistrates): Your case is, then, that your analysis does not correspond with the one just handed to the Bench?

Mr. Kirby: That is so.

Mr. Kyle having given formal evidence, Mr. Kirby reminded the Bench that his clients were only the retailers, and the pills were purchased by them from a wholesale house in the belief they were the full strength. He was not instructed by the wholesale house, however, but by the defendants.

The case was adjourned till July 11.

WHITE PEPPER.

At Burnley on June 15, Mary Ann Stevenson, grocer, Padham, was fined 2*l.* and costs for selling white pepper adulterated with 20 per cent. of bleached husks. The defence was that white pepper is a commercial article, that bleached husk is common, and that bleaching is common. It was argued further that there is no standard as to what percentage of husk there ought to be in white pepper. Notice of appeal was given.

SPIRIT OF CAMPHOR.

On June 15, at the Cannock Police Court, Thomas E. Fereday, grocer, Bridgtown, was summoned for selling adulterated spirit of camphor. On May 5 Inspector Toy purchased at his shop 6 oz. of the spirit, which, on analysis, proved to be deficient in camphor to the extent of 23 per cent. according to the British Pharmacopœia. For the defence, it was stated that the drug had been purchased from a Birmingham firm, by whom it was guaranteed. The defendant was ordered to pay 1*l.* 1*s.* costs, without a conviction.

High Court Case.

THE ULSTER CHEMISTS (LIMITED).

In the Dublin Chancery Court on June 16, before the Vice-Chancellor, Mr. Matheson, K.C. (instructed by Messrs. Carson & McDowell), applied on behalf of the liquidator, Mr. Hugh Smyly, for an order that he be at liberty to proceed, by action in the High Courts of Justice, in the name of the Ulster Chemists (Limited), against Thomas Needham, late director of the company, and Samuel Gibson, late managing director of the company, pursuant to the opinion of counsel, in respect of their liabilities to the said company.

Mr. W. H. Brown, for Messrs. Delbranco & Co., supported the application, stating the sooner the action was brought the better for all parties.

The Vice-Chancellor made the order in the terms asked for.

A Menthol-contract.

A CASE of considerable interest to Japanese merchants has been occupying the attention of the Law Courts in Japan. It is an action for damages for breach of contract in regard to the non-delivery of menthol, brought by Messrs. Grösser & Co. and Messrs. E. Popp & Co., both of Kobé, against Mr.

Ogawa Koji, a merchant in Fukuyama, Bingo. Messrs. Grösser's claim amounts to 13,845 yen, and that of Messrs. Popp & Co. to 13,365 yen. The case was first heard on February 21, when judgment was given for the plaintiffs by default. A protest was lodged by the defendant against the judgment in default, and the case was heard on March 30. As on this occasion, plaintiffs not appearing, judgment was given in default in favour of the defendant. The protest of counsel for the plaintiffs, however, having been upheld by the Court on April 8, it was asked that defendant be ordered to pay the sums claimed, with interest at the rate of 6 per cent. per annum. Counsel (Mr. Hirata) explained that on September 16 last year the defendant sold to Messrs. Grösser & Co. 1,350 kin (160 momme) of menthol at 7.50 yen per kin, and signed a contract accordingly. On October 12 last the defendant sold to Messrs. Popp & Co. 1,350 kin of menthol oil at 5.50 yen per kin, and on October 26 a further quantity of 900 kin at 6.90 yen per kin. The defendant agreed to transport the oil to Kobe and to deliver it to the plaintiffs in each case not later than November, but failed to fulfil the contracts, notwithstanding the repeated demands of plaintiffs. In the meantime the price of menthol largely advanced, the quotation rising to 12 yen per kin. On October 14 last the defendant further sold to Messrs. Grösser & Co. 900 kin of menthol, to be delivered at a certain time. Before that time arrived the defendant visited Messrs. Grösser & Co., and stated that, owing to the lack of funds, he found it very difficult to purchase the oil, and applied for an advance of a certain percentage of the price of the goods, adding that if he could not be accommodated it would be impossible for him to deliver the goods on the date agreed upon. Messrs. Grösser advanced the sum of 2,100 yen over and above the contract-price, in order to enable him to deliver the goods. This sum the defendant now refused to refund. Mr. Kurosawa, for the defendant, urged that the claims of the plaintiffs be dismissed. Counsel admitted that defendant agreed to deliver menthol as claimed by the plaintiffs, but owing to the bad weather prevailing last year the peppermint crop was much injured. In the province of Bingo the harvest was but one-third that of an average year, while in the province of Bizen it was only one-tenth. In these circumstances the defendant was compelled to cancel his contracts with all his buyers. In some cases the contracts were annulled, no goods being delivered at all, and in others the contracts were partially fulfilled. Counsel denied that the market-price of menthol had risen as alleged by the plaintiffs, which statement was challenged by counsel for plaintiffs, who applied to call Mr. F. Gensen, of Messrs. Winckler & Co., and Mr. Tsuru Tokichi, of Messrs. Raspe & Co., to prove that the market was very high. For the defendant, Mr. Kurosawa applied to call three Japanese to prove that the market for menthol oil was not in such a flourishing condition in or about November last as alleged, and that the contracts had been cancelled. The hearing was adjourned until April 14, when evidence on both sides was heard as to market values, after which counsel for plaintiff moved for an adjournment, stating that some of the witnesses examined had been guilty of perjury, and he wished to closely investigate the evidence. At the resumed hearing on May 2, Ikeda Magosaburo, formerly an employé of Messrs. Popp & Co., was examined at the instance of the plaintiffs. The witness deposed that he did not know that the contract between Messrs. Popp & Co. and the defendant had been cancelled, though he had heard that negotiations had been going on for the purpose. On December 26 last the defendant came to the office of Messrs. Popp & Co. and received 1,804 yen for fifty cases of menthol oil delivered to the firm. On that occasion the defendant proposed the cancellation of the contract, and Mr. Popp replied that he would cancel it if his clients in England and Germany agreed. At the conclusion of this witness's evidence the argument of counsel in the case was heard, and the proceedings were concluded. Judgment was reserved till May 9.

NO SUBSTITUTION.—A correspondent (67/29) caps the note on page 966 of our June 13 issue with a handbill issued by a N.W. firm of chemists with the following wording: "B— & J— have purchased a large stock of Messrs. Burroughs & Wellcome's tablets and other high-class preparations, and would respectfully inform their customers that when these are asked for no substitutes will be offered."

Westminster Wisdom.

(From our Parliamentary Representative.)

MR. LONG AND THE SUPPLY OF LYMPH.

In the course of the debate on the vote for the Local Government Board, some discussion occurred in regard to the supply of lymph by that Department. Mr. Long, in his reply, made the following statement:

As to the supply of lymph, that question had often been debated in the House. He could not hold out any hope of being able to supply lymph to private practitioners. It had to be remembered that public vaccinators obtained their lymph for primary vaccination free of charge, and during the recent epidemic of smallpox the Board were able to supply them, not only with the lymph for primary vaccination, but also with a large proportion of that required for secondary vaccination. The demand that the lymph should be supplied also to the private practitioner was a very natural one, but he doubted whether it was really necessary. There was a Jenner Institute in London, which made arrangements for the supply of lymph quite as good in quality and character as that supplied by the Government. In addition to that, there were growing up over the country great laboratories in which all sorts of admirable scientific work was being carried on, and in which, among other things, they were producing lymph which probably would be as good as anything the Government produced. There was also the lymph produced by ordinary mercantile firms. During the recent epidemic he made every inquiry to see whether there was any justification for the idea that this ordinary mercantile lymph was not of a thoroughly satisfactory character, but he failed to find any evidence that the majority of it could not be relied upon as being thoroughly satisfactory in all respects. To undertake to supply all medical men with lymph at a certain price would mean an entire change in the Government lymph-establishment and the ruin of the commercial people who had entered upon its manufacture as a part of their business. Moreover, it was quite conceivable that at times of great pressure the Government Department would not be able to supply all the lymph required, and the result would be a breakdown. By a recent scientific discovery, which was not yet fully developed, it might be made possible to produce lymph which would not have to be destroyed if kept beyond a certain time; but at present the real difficulty with which they had to contend was the fact that lymph could not be produced during the slack time and put in reserve for use when the pressure came. Sterilised lymph could not be kept for more than a certain time, so that it was impossible to accumulate a reserve for use in time of an epidemic; consequently, it would be incurring a great risk to undertake to supply all private practitioners in the country. He quite realised the force of the demand, and he was not making this statement without having carefully considered and discussed the question, not only with his own medical advisers, but also with distinguished medical men outside the Department. Among those who were best qualified to judge it was agreed that it was better to continue the present system than to put the whole supply of lymph into the hands of the Government.

SIR CHARLES DILKE'S SHOP BILL.

Sir Charles Dilke introduced a Bill on Tuesday to amend the law relating to shops, and some misunderstanding has arisen on the subject in view of the fact that early in the Session the member for the Forest of Dean brought in a Bill with the same title and the same object. Sir Charles informs me that the Bill is the same as that introduced some months ago, but that owing to a formality in the procedure of the House it has been necessary to reintroduce it. It is now supported by Mr. John Burns, Mr. Ernest Flower, Mr. Lloyd-George, Mr. George Kemp, Mr. Melville, Mr. McCrae, Mr. H. J. Tennant, Mr. Nannetti, and Sir Barrington Simeon. It is unnecessary to recite the provisions, as these are already well known to all concerned. While dealing with this subject I may mention that Mr. Cameron Corbett, who has charge of Lord Avebury's Bill, tells me that there is a possibility that the two Bills may become the subject of a conference with the object of ascertaining whether it is possible to arrive at some compromise in order to hasten legislation.

The drugs and medicines annually imported into Damascus are calculated at about 3,500^l, about three-quarters of the total coming from France. Germany, Italy, Austria, and Great Britain have also a small share in the trade.

The Pharmacy Bill.

IN forwarding his circular-letter *re* the Pharmacy Bill to every member of Parliament (see *C. & D.*, June 6, page 907), Mr. Newsholme, in a postscript, drew attention to the following statement, also sent with the letter:

1. The promoters of this Bill are the Pharmaceutical Society of Great Britain, established in 1841, and incorporated by Royal Charter in 1843, and having a voluntary membership of 5,800.

2. By the Pharmacy Act of 1868 the Society is entrusted with the administration of the Poison Laws of Great Britain.

3. Sections 1 and 15 of that Act enact that only persons qualified by examination as chemists and druggists or as pharmaceutical chemists may—

(a) Sell poisons; that is, carry out the actual sale.

(b) Keep open shop for the sale of poisons.

(c) Take the title of "Chemist and Druggist" or "Pharmaceutical Chemist."

4. These sections also compel "persons"—

(1) To conform to the regulations provided by the Act for keeping, dispensing, and selling poisons.

(2) To compound pharmacopœia medicines according to the Pharmacopœia.

5. By a decision of the House of Lords the foregoing sections do not apply to limited liability companies.

6. A person who fails to pass the qualifying examination may convert himself into a company—often a so called "one-man" company. As a company he can do all those things which as an individual he could not; and he is not amenable to the regulations for storing, dispensing, and selling poisons, or to the Pharmacy Act provisions for correctly dispensing.

7. Whilst the Society does not seek to prohibit companies keeping open shop for the sale of poisons, the Bill would, as far as it is possible, place them in the same position as individuals, so far as the poison laws are concerned.

8. When a poison is sold by an unqualified assistant the employer, whether a person or a company, is not penalised. Civil proceedings for the recovery of the penalty (5^l.) can only be taken against the assistant. The assistant often pleads he has no means, and, though the Society obtains judgment, no penalty is paid, and the assistant goes on breaking the law with impunity.

9. The Bill seeks to make the employer, whether an individual or a company, liable for the penalty, and thus would prevent poisons being sold and dispensed at branch shops by unqualified assistants, whether such shops are owned by individuals or companies.

10. There is at present no means of knowing (1) where poisons are retailed or (2) who is in charge of shops where poisons are stored and retailed.

11. The Bill provides for proper registration of such shops and the managers thereof.

12. The Bill removes any doubt as to whether poisons sold by hawkers, and in public market-places, are within the present regulations relating to the retailing of poison.

* * * *

Letters have been received from members of Parliament for Nottingham and the county by Mr. A. Eberlin and Mr. W. Gill, Secretaries of the Nottingham and Notts Chemists' Association, in answer to the resolutions forwarded to them in regard to the Pharmacy Bill and the sale of poisonous substances. Mr. E. Bond, M.P., doubts if the Bill will make much further progress this Session, but should it again come on for discussion he promises to give careful consideration to the Association's representations. He thinks, however, there are one or two provisions which he would not be able to support as they now stand. Mr. J. H. Ycxaill, M.P., says some of the matter referred to in the resolutions is highly contentious, and he cannot promise more than to give careful and judicious consideration to the arguments on both sides. Lord Henry Bentinck, M.P., Sir Frederick Milner, M.P., and Mr. J. E. Ellis, M.P., all promise to give the resolutions their careful attention, the last-named expressing the opinion that there is not much probability of the Pharmacy Bill being further advanced this Session.

KEPT TO ORDERS.—Doctor (to Mrs. Perkins, whose husband is ill): "Has he had any lucid intervals?" Mrs. Perkins (with dignity): "E's 'ad nothink except what you ordered, doctor." *Punch*.

The question of erecting a platinum-refinery in Russia is receiving serious attention. Hitherto the Russian platinum, representing 95 per cent. of the world's supply, has been exported in a crude state.

Veterinary Notes.

By M.R.C.V.S.

Cattle-itch.

A CERTAIN kind of scab or itch peculiar to cattle is caused by a small mite (*Psoroptes communis* var. *bovis*) that lives on the surface of the skin and burrows in the epidermis. It only attacks cattle, although sheep-scab is caused by a similar parasite. Close observation is required, according to a writer in the *Farmer and Stockbreeder*, to detect the disease, which usually attacks young cattle—calves, yearlings, and two-year-olds—but may fix on cattle of any size that are not in condition. The first symptom noticed is an intense itching, usually in the region of the neck and shoulders. The animals lick themselves, dig at the skin with their teeth or horns, rub against posts or barbed wire, often tearing the skin until it bleeds. The disease gradually spreads along the back, sides, and outside of legs, but does not attack the thighs, skin of the abdomen, or inside of the legs. The early stages are characterised by rough coat and a scurvy condition of the skin. The scurf becomes mixed with a sticky exudation and forms crusts in the hair. The hair then comes off, leaving bald patches of thick, calloused, and wrinkled skin. These patches generally show first on the top of the neck. Animals with scab present a dejected and debilitated appearance and lose flesh. The disease is very infectious, being spread by direct contact with infected posts, feed-racks, walls, &c., against which infected animals have rubbed. The mites can be easily detected by means of a hand-lens, and as soon as discovered in a herd of cattle the affected animals should be isolated and the infected quarters and rubbing-posts sterilised with a 5-per-cent. solution of carbolic acid. Affected animals should be well fed and cared for, and "salted" with a mixture of common salt and powdered sulphur in the proportion of 1 of sulphur to 10 of salt. For external treatment the coal-tar products, such as car-sul, chloro-naphtholeum, zenoleum, or creolin (2½-per-cent. solution in water), may be used. A cheap and effective dip is made as follows:

Powdered sulphur	2½ lbs.
Unslaked lime	1½ lb.
Water	10 gals.

Slake the lime to form a thick paste, sift in the sulphur, and stir well; put this mixture in a kettle with 2½ to 3 gals of water and boil for thirty minutes at least, or for two hours if practicable. The chocolate-looking mass being allowed to settle, the clear liquid is drawn off, and enough water added to make 10 gals. All dips are more effective when used warm—from 100° F. to 110° F. The animals should be kept in the dip until the scabs are thoroughly saturated. A second dipping about a fortnight after the first will kill any mites that may have hatched from the egg after the first dipping, but one dipping is usually sufficient.

Treatment of Piners.

IN the new edition of the English Jersey Cattle Society's handbook—*Jersey Cattle: Their Feeding and Management*—a new chapter is added on the treatment of wasting diarrhoea—parasitic gastro-enteritis. This disease is the cause of "wasters," "wastrels," or "piners," and causes the cattle to waste away without any febrile symptoms or loss of appetite. Parasitic gastro-enteritis being, as its name implies, caused by a parasite, the idea has been suggested of using a vermicide in treating the disease. Mr. Mathews, the editor of the book, finds that doses of ½ oz. of black shag tobacco first thing in the morning, the same dose the following, and on the fourth, fifth, seventh, and eighth day, soon effects a cure. Within ten days after the first dose an improvement in the condition of the animal should be obvious.

The imports of chemicals at the port of Seville during 1902 amounted to 11,476 tons, against 8,797 tons in 1901 and 9,146 tons in 1900.

APOLLINARIS WATER is, according to a writer in the *Financial News*, increasing greatly in popularity in the United States, golf and Scotch whisky being partly responsible for it, with consequent diminution in the consumption of lager beer and "old rye," at least amongst the well-to-do.

Pharmaceutical Book-plates.



The book-plate of Dr. Maurice Greshoff, Director of the Chemical Laboratory, Colonial Museum, Haarlem. Dr. Greshoff was elected a corresponding member of the Pharmaceutical Society in 1899. The original is in crimson ink.

(Contributions to this column are invited by the Editor.)

"Is it Worth While?"

A "CHEMIST AND DRUGGIST" correspondent asked his fellow-druggists whether, after all, the time had not come to recognise that the amount of profit that can be furtively made by trading on other folks' advertising is no longer worth the irritation and loss of prestige involved. It is not to be expected that this sort of letter would have altogether an enthusiastic reception; but I was pleased by the tone and temper of the replies which it provoked. These things make it pretty evident that the drug-trade, at least, is getting pretty tired of substitution. The warnings of advertisers are evidently having an effect. When a man goes to the druggist for an advertised medicine, and begins to have talk about "something else just as good" handed out to him, he is more and more developing the habit of walking out and going elsewhere, taking with him his general business, which the druggist don't at all like losing.

As a matter of fact, substitution in the drug-shop is bound up with the cut-price difficulty. Cutting has been taken to such a point that there is practically no profit for the retailer on patent medicines and similar products. This increases the temptation to substitute, and substitution is the one thing which prevents large advertisers from stepping in to stop cutting. A number of small sellers, and a few larger ones that for some individual reason depend to a greater extent than most on the help of the retail trade, are already protectors of price. They have just been joined by Scott's Emulsion. But so long as substitution is as rife as it is, cutting will never be interfered with by advertisers generally. It isn't, in plain terms, good enough to raise the price which the consumer has to pay, to alienate the big cutting stores, and create difficulties in trade generally, to please substitutes and make substitution easier. A rise in price, due to protection against cutting, makes substitution practically inevitable in a large number of cases. A man who is a steady user of a certain article at one price, if asked to pay more, inevitably kicks, and probably starts for the door to see whether he can't do better elsewhere. How are you to expect that the shopman will not try to sell him something, no matter what, to keep his trade? The large advertisers see that, and they consequently keep strictly aloof from the association of druggists which tries, by methods not always unobjectionable, to force price-protection.—Mr. T. Russell, in "Printers' Ink."

A GOOD THING.—"I am sorry, doctor, you were not able to attend the church supper last night. It would have done you good to be there." "It has already done me good, madam. I have just prescribed for three of the participants."

Observations and Reflections.

BY XRAYSER.

The Congress Season

has come upon us with a rush, and pharmacists who have been dining and dancing through the winter have only just time to pack away their dress-clothes and hunt out their tweeds and flannels. Plymouth chemists have had their high tea at Callington; fifty Dandee chemists' assistants and their lady friends were last heard of rowing on the loch at Monikie; Edinburgh chemists are offered a ten-and-sixpenny excursion to Rothesay; a party of Forfarshire chemists are to be found at the Crown at Brechin while this paragraph is being printed; Aberdeen chemists are booked for dinner and tea at Polarch on July 1; the faithful Patas and Odas are looking forward to their annual treat on the river; and Bristol, with its round of gaities, including dance, smoking-concert, garden-party, teas, dinners, the Pump-room at Bath, and the ruins at Tintern, is looming in the perspective.

May the Sun Shine Brightly

on all these pleasant festivities, which deserve to be greeted as among the gratifying signs of the social progress of pharmacy. The reports of them bulk rather largely in our weekly budgets, and the superficial reader might fancy that all the trade had gone a-junketing. But this, unfortunately, is just what does not happen. How many of the 16,000 of us share in these revelries? If the *C. & D.* were to report the places where there has been no excursion, where the chemists had all been grudging away at their lifelong tasks, where there were no dress-suits or tweeds in the wardrobe, and none too lavish luncheons, or teas, or suppers in the back parlour, the picture would be truer, but the streaks of light in it would be very scanty. The festival-pharmacists figure like a stage-army again and again; it would be reckless reckoning to assume that they constitute 10 per cent. of the lot. Happy 10 per cent.! Think occasionally of the less fortunate 90 per cent.

Competition and Communion

are essentially incompatible. It is right and proper and desirable that competitors should avail themselves of opportunities of association, and learn, as far as they can, to respect their rivals; but it can hardly be right and proper and desirable to sit at high tea next to the chemist round the corner one day and to be viciously scraping his label off a bottle the next day. Tolstoi has sketched somewhere a scene in the Crimean war. The French had attacked certain Russian positions, and there had been great slaughter. Next day, under a flag of truce, the contending troops were collecting and burying their respective dead. And Tolstoi shows the soldiers of the two armies pleasantly chumming, each trying to talk the other's language, examining each other's trinkets, exchanging souvenirs; then returning to their lines and endeavouring to murder each other again. The picture makes the reader sick of war, as the writer intended it should; but it does not make the fraternising scene any less attractive. Trade-competition tempered by occasional high teas is logically as indefensible as a war with interludes of friendliness, though the tragedy in the trade case can hardly be seriously compared with that which Tolstoi delineates.

Economically,

competition seems at first sight to be an absurdly wasteful way of utilising human talents and energies, inciting men who should co-operate for the common good to

spend a large part of their time either warding off the attacks of rivals or seeking to maim and cripple those rivals—a method of promoting general wealth corresponding to that prevalent in the Hebridean island, where Dr. Johnson said the inhabitants made their living by washing each other's clothes. Historically, perhaps, the age of individual competition will not be a very long one. Not so long ago trades were regulated by guilds which rigorously repressed personal ambitions; in the near future trusts, or trade unions, or municipal enterprises may render such ambitions hopeless; a cheerless prospect, after all. So that it is not certain that for healthy industrious men, the stimulus of the existing system may not be the best to live under. But

Ethically,

can competition be defended? I have been dipping into Herbert Spencer's "Principles of Ethics" recently, and that philosopher is responsible for the question just asked. Dipping into Mr. Spencer's Synthetic Philosophy is a seductive but risky proceeding. The arguments seem so clearly put, and both sides are so justly dealt with, that the student thinks he has arrived at a definite opinion. If he seeks to formulate that opinion, however, he soon discovers that he has only been led into the mazes of the Unknowable. On this question of the ethics of competition Mr. Spencer is particularly unsatisfactory, when you come to reflect on what he has written. He is a sturdy opponent of the socialism which would substitute collective for individual effort. But he sees, too, the "mercilessness" of the battle of life as it presents itself in this competitive age to the weak and incapable. He illustrates this by reference to the methods of a New York department shopkeeper who acquired a colossal fortune. "A common practice of his was suddenly to lower his prices for a certain class of goods to an unremunerative rate," to the serious injury, if not the ruin, of weaker competitors. Mr. Spencer describes this and other methods of trade as commercial murder, and often worse than murder in view of the pain inflicted. But is there any moral distinction between killing rivals, or trying to kill them, by one heavy blow or by a series of lighter ones? Is not all competition a form of commercial maiming and wounding, if not murder, and can it be ethically justified? The philosopher leaves me on this subject, in the happy phrase of the Prime Minister, with only unconcluded convictions.

Pharmaceutical Ethics,

indeed, need looking into again. It was in 1866 when Mr. Joseph Ince read his classical paper on that subject before the Pharmaceutical Conference. It appears to have been necessary to tell pharmacists then that when quinine was ordered salicin must not be substituted. That looked bad, but before we throw stones at our frail fathers it should be remembered that quinine at that time was 15s. per oz., and that the Sale of Food and Drugs Act had not been enacted. How far we owe our superior morality to the statute-book is, perhaps, a tender question. The maintenance of professional charges for dispensing was an ethical duty then; propping up a declining business by selling cheap and flashy sundries approached the region of pharmaceutical misdemeanour, and advertising by pharmacists was left an open question. Our consciences have become blunted in regard to some of those offences since 1866. There is not much guidance for us in our present-day difficulties in Mr. Ince's lecture. He addressed a drug world before stores had appeared, before the Inland Revenue had become active, before patents had been cut, and, on the other hand, before the inspector was abroad. Our ancestors had less temptation than we have, but we run greater risk of being found out.

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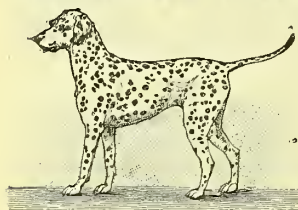
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Editorial Comments.

Naming Remedies.

III.

WE have again received a large number of inquiries respecting the new ruling as to the stamping of medicines held out through their names as remedies. We deal with some of these in the Legal Section of our Correspondence columns. It appears necessary to explain once again that the case of *Ransom v. Sanguinetti* has given rise to the trouble. During the argument in that case the Solicitor-General indicated that such a title as "Cough-mixture" holds out the preparation as a remedy for a cough, and is, therefore, dutiable as contemplated by the Act. This contention, in other words, constituted the first part of the case stated for the Divisional Court's judgment. The defence, as represented by Mr. Asquith, made but a feeble attempt to lead the Court to a contrary view, and the unanimous decision of the three Judges was given in favour of the Board of Inland Revenue. Henceforth, therefore, remedies for human ailments, which are sold in a bottle, box, packet, or other enclosure, and labelled as indicated above, must be stamped to the extent of 1½d. for values up to 1s., and so on according to the law. At this point the decision in *Farmer v. Glyn-Jones* comes in, giving qualified chemists a measure of relief from the former decision, in so far as the *Farmer v. Glyn-Jones* decision secures to qualified chemists the exemption, which so long lay dormant, permitting them to sell without stamping "known, admitted, and approved" remedies—not all such remedies, because some have been dutiable, but all B.P. articles are exempt. Most popular household remedies which are sold retail by chemists in pennyworths

are included in the exemption secured by *Farmer v. Glyn-Jones*, and may be labelled "Cough-mixture," or whatever ailment, name, or nature of the medicine may be, *provided the nature of composition is indicated in the label by reference to the published formula or statement of the ingredients*. The italicised words are not the decision of the Court, but the ruling of the Board of Inland Revenue. It may not be law, but is a convenient compromise to avoid litigation. For example, a qualified chemist may be within his rights by selling Christison's cough-mixture, simply labelling it "Cough-mixture." It is a "known, admitted, and approved remedy" for a cough, but the onus of proving that it is lies upon the qualified chemist who retails it as "cough-mixture," and this can be done (1) in the course of legal procedure, or (2) by a reference on the label, (3) by informing the Board of Inland Revenue before the mixture is sold what its nature is. The Board have selected the second method as the most convenient for both parties. There is no doubt that even this is causing great inconvenience at present to those who benefit by the exemption. We wrote to the Board the other day, asking—

"If the Board will allow some time—say, until January 1, 1904—to permit wholesale and retail druggists to work off their present stocks of labels? In most instances these have not been liable hitherto, or have been marked by the Board 'Not liable.'"

To our letter we have received a reply, from which we extract the following:

S. 24374
1903

Inland Revenue,
Somerset House,
London, W.C.,
17th June, 1903.

Sir,—I am to state that the Board will not take proceedings up to the 30th September next against persons selling unstamped articles under existing stocks of labels which were not regarded as involving liability to medicine-stamp duty prior to the recent decisions in the cases of *Ransom v. Sanguinetti* and *Farmer v. Glyn-Jones*.

I am, Sir,

Your obedient servant,
E. E. STOODLEY,
Secretary.

We may explain that the rest of the letter refers to "Pharmaceutical Formulas" and "Diseases and Remedies," copies of which we have submitted as books of reference whose formulæ are largely used by qualified chemists in preparing medicinal counter-specialities. We understand that the Secretary of the Chemists' Defence Association, who also moved in the matter (*vide* page 941), has received a similar reply. It will be noted that the Board's letter is comprehensive, and does not refer solely to qualified chemists, so that until September 30 the sale of ailment-named remedies by any person will go on as if the *Sanguinetti* case had never been heard of. This should give everybody the opportunity to put their houses in order. We may add that for revenue purposes "persons" includes limited companies.

Citronella Oil.

THE investigation in regard to the identity of a new adulterant of citronella oil and the failure of Schimmel's test to detect it is brought to a fitting conclusion by Messrs. Parry and Bennett in a note from them which we publish to-day. We understand that observations by Messrs. Schimmel & Co.'s chemists confirm generally the conclusions to which the English workers have come, except that the adulterant may be a fractional distillate of Russian petroleum—a fact which Messrs. Parry and Bennett have indicated to be not improbable, as there is considerable similarity in properties between certain fractions of that petroleum and those of

resin-spirit. This, however, is a secondary matter compared with the exposure of the adulteration which the English workers have made, and which has created considerable interest in Ceylon. Writing on the subject, the *Overland Times of Ceylon* remarks:

"From the Customs we have been unable to obtain statistics of the imports of resin-spirit, as these are included with a number of other oils under the heading 'Oils, other.' A local chemist, referring to the question says:

"Schimmel's test is not accepted now by buyers, as good, pure oils could not, at times, pass it while adulterated oils did. It made no allowance for local surroundings—soil, climate, &c.—and its results were very unsafe. Consequently, that test cannot be followed, and careful analysis has taken its place.

"Laboratory examination showed the existence of terpenes. Terpenes may be a multiplicity of things—but of them resin is one. Examination has not been pushed on to find what particular terpenes it was that was (*sic*) found—that did not fall within immediate requirements in laboratory undertaking. Further, resin were (*sic*) among the least known; chemical actions were not discovered, as how to make it crystallise, &c. There is every possibility of the adulterant terpenes being resin; but it may be eight or ten different other oils.

"Petroleum is a well-known adulterant and referred to in the text-books.

"Local methods of trade make it scarcely probable—if the assertion be taken as being correct—that the importation has been undertaken by any native firms, and we are therefore forced to come to the conclusion that European firms are supplying the native, however innocently, with an article that is being used to no good purpose. We suggest that the Government might assist the Galle firm who have taken up the matter, and endeavour to trace whether any resin-spirit has been imported and, if possible, inquire of the importers for what purpose it was obtained."

We would fain hope that the Ceylon Government gave assistance in the matter, but are not sanguine that anything Governments may do will stop the propensity of some native distillers and dealers to sophisticate their products. A constant check must be kept on essential oils which come from the East, and so far as citronella oil is concerned the analytical factors given by Messrs. Parry and Bennett will suffice to show when the oil is or is not pure.

Veterinarianism at the Cape.

THE reports of the Colonial Veterinary Surgeon (Mr. D. Hutcheon) and his assistants for the year 1901 have just come to hand. Though belated, they are interesting if only for the indication they give of the care and enthusiasm with which the reporters experiment and engage in research under conditions which must be arduous and full of discouragement. During the year 1901 there was a great outbreak of glanders amongst horses, and of lung-sickness amongst cattle, throughout the country. The spread of glanders was mainly due to the disposal of cast military horses (for the war was still raging), and lung-sickness principally to the necessity for moving infected herds or transport oxen during military operations. Then rinderpest reappeared in the Orange River Colony and in Basutoland, and that disease alone engaged the sole attention of four members of the staff almost continuously, in preparing glycerinated bile and serum, in examining reported outbreaks of the disease, advising and arranging for the inoculation of infected herds, and in examining stock travelling from infected into clean areas. The routine-work thus hindered investigations requiring care and continuity, yet some experimental results are reported. Mallein appears to be still the only remedy for glanders, and indeed inoculation of some sort is the panacea for most of the diseases described. Heartwater in sheep and goats gave much trouble. It was suspected that ticks, or some such skin-parasites, were the medium of infection by skin-inoculation. A series of experiments was therefore begun with the red and blue ticks, *Rhipicephalus*

Evertsi and *Rhipicephalus decoloratus*, but with negative results. With the help of the Government entomologist, it was found, however, that the disease was communicated by inoculation, and could be transmitted from one animal to another. In the search for a preventive remedy a series of inoculations was performed with (1) bile, (2) blood and serum of cattle and horses, (3) preserved virulent blood (containing 5 per cent. glycerin and $\frac{1}{4}$ per cent. carbolic acid in aqueous solution), (4) citrated virulent blood (blood 1 mixed with 3 of normal saline solution), (5) serum of virulent blood, (6) anti-thermal blood, (7) small intensive doses of virulent blood, (8) serum, and (9) the blood of a recovering animal. The results appear to show that intravenous inoculation with blood from an animal just over thirty days recovered is of some value in preventing the disease. Another disease which affects sheep over a large area of South Africa is malarial catarrhal fever, or "blue-tongue." It is a specific disease, characterised by catarrhal inflammation of the mucous membranes lining the mouth, lips, and the upper air-passages. There is also a more or less catarrhal condition of the mucous membrane lining the whole of the digestive tract, accompanied by a high temperature and great prostration. The originating cause is a small intracorporal parasite or plasmodium, which stains well with Plehn's method, when it appears as a small spherical body, staining dark-blue against the eosine-red of the stained corpuscle. Preventive inoculation was tried with serum obtained from the blood of a sheep recovered from an attack of malarial fever, and some success is reported. Medicinal remedies employed with varying success were a mixture of Stockholm tar and sulphur, a tablespoonful daily; the tar-derivative sheep-dips in doses of a teaspoonful daily, and turpentine in milk or in oil. A mixture of chlorate of potash and tincture of aconite has also been used with beneficial effects. The vets. have likewise discovered that malignant jaundice in the dog is capable of being communicated to susceptible dogs by the progeny of the South African dog-tick (*Hæmaphysales Leachi*, Neumann). Another elaborate series of experiments is reported in this connection, the result apparently being that the serum of highly "fortified" dogs has distinct curative action. It can prevent death when injected in large doses twenty-four, and even forty-two, hours after inoculation with a dose of virulent blood which is fatal to controls in five days, but it has no power to retard death when injected only after the appearance of the parasites. One of the assistants reports his treatment of an alarming outbreak of blindness in a fine herd of cattle in Northern Natal. He found nine bad cases of keratitis, and a few mild ones. The owner of the herd had blown in alum and ground shells, so the eyes were much inflamed. The treatment giving the best result was found to be the prompt administration of a strong saline purgative, and a lotion of zinc sulphate and belladonna extract (10 grs. sulphate, 2 grs. extract, to 1 oz. of rain-water) applied locally twice daily.

The Cross Case.

We heartily congratulate the Council of the Pharmaceutical Society on their success in the proceeding against Messrs. Alex Cross & Sons (Limited), Glasgow, for selling in the form of a pleasant syrup and to an unknown person as much arsenic as would kill 200 people. The congratulations are in place, because Scotch lawyers have microscopic vision when they wish to find means for averting the law's rigours. Even now, although the company has been found guilty of violating the conditions of sale which the Pharmacy Act equally with the Arsenic Act imposes upon sellers, whether chemists and druggists or not, their lawyer proposes to carry the case to the Court of Session. It will be noted that Alex. Cross & Sons (Limited) have not disproved the facts

proved by the prosecution—viz., that they sold the arsenical preparation without labelling it prominently "Poison," or with their name and address, and without registering the sale. We are thus left with the fact that Mr. Alexander Cross, M.P., who took so prominent a part in the Poison Committee's inquiry, is identified with a business which not only ignores the law as described, but endeavours to outwit it by legal technicalities. Should Mr. Cross be a member of the House of Commons when poisons legislation comes forward, his voice on these matters should not carry much weight.

Medical Ethics.

Some indignation has recently been caused in medical circles in consequence of the action of the Ethics Committee of the British Medical Association respecting a list of consultants which Parke's Drug-stores publish in their price-lists. The committee appeared to consider it a breach of professional etiquette for medical men to permit their names and addresses to be circulated to the public in this manner, and each gentleman in the list was written to in terms which many of them strongly resented, on the ground that the British Medical Association has no mandate, far less authority, in such matters. Others were alarmed, and wrote in anxious, if not threatening, terms to Parkes; indeed, a lawsuit was imminent, but better counsels have shown that the circulation of the list is not a libel, nor a personal injury to the gentlemen mentioned in it. We understand that Parke's Drug-stores have smoothed the ruffled waters by consenting not to repeat the list in subsequent issues of their price-list. This course will satisfy those who are not mentioned in the list, and a proportion of those whose names are in it have not written to thank the Ethics Committee for their action.

Would Kill the Little Ones.

Truth is getting nearer verity on the company-pharmacy question. Replying to a pharmaceutical chemist who has written about it, our contemporary says:

Where the law seems to have got wrong at present is in failing to distinguish between the ownership of the business and the actual dispensing. I would not allow the unqualified Mr. Smith to form himself into a company for the purpose of evading the law by dispensing drugs himself. On the other hand, I would make no objection to the proprietors of a business, whether individuals or a company, being unqualified, provided that they had nothing to do with the dispensing. My correspondent goes on to draw an alarming picture of the time when the qualified proprietors of druggists' businesses will be entirely driven out of the field by the competition of companies, and when the Pharmaceutical Society will be engaged in holding examinations for no other purpose than to pass assistants for the service of companies or other unqualified proprietors. I do not know why the individual chemist should be driven out of the field by joint-stock competition more than the individual butcher, baker, or candlestick-maker. But, even if that result be imminent, it does not necessarily call for Parliamentary interference.

On the first point *Truth* is sound, and if Mr. Labouchere can legislate about small companies in a way that will not touch the large, and yet be fair to both, he will be made the member for Bloomsbury. He ought to know that the dispensing of drugs is not governed by law unless they happen also to be poisons, in which case the Legislature has been more concerned about the sale. Further, the law at present is that the employer, as well as the employé when he does the employer's duties, shall be qualified, and there is no reason for departing from that sound condition in the case of companies.

The Novelist and the Pharmacy Act.

A serial tale—"Verona's Father"—by David Christie Murray, is at present running in the columns of the *People*. Chapter XX., which appeared in the issue of that weekly for May 31, is one that will interest all pharmacists, on account of the startling statements there made regarding

the evasion of the Poisons Act by chemists. In the course of a boarding-house conversation one gentleman—"the loudly familiar man"—tells the company generally that anyone "can buy poison enough to kill the British Army, and nobody a whit the wiser." A meek old gentleman, who has practised medicine over forty years, controverts that statement, but "the loudly familiar man," who "is in the trade and has travelled for some of the largest houses in the country," triumphantly points to "bella-donna." There is nothing more deadly than atropine, he says, which "is the active principal of bella-donna." The old gentleman admits the potency of atropine, but asserts that before it could be procured the purchaser would have to be introduced to the chemist, and would have to sign the poisons-book unless he were a qualified medical practitioner.

"Not a bit of it," said the loud man. "I tell you, you can walk in anywhere and buy a tube of deadly nightshade tabloids for sixpence, and you'll get a quarter of a grain of atropine in that tube—a two-hundredth part of a grain is a dose. For three shillings you can have a grain and a half, and a tenth part of that will lay you out as stiff as a tree." . . . "They're perfectly soluble in water, . . . and they've no smell and no colour. Why," he continued, stretching his thumb and his finger apart, "you can put enough in a bottle that size—a bottle you could carry in your waistcoat-pocket—to kill a street full of people. Don't talk to me about the Poisons Act. The retail chemist drives a coach-and-six through it every day."

He further informed his audience that atropine is mainly prescribed by oculists, and that nobody has any right to ask what it is wanted for. On the strength of the "loudly familiar man's" misleading assertions the novelist then sends one of his characters with suicidal intentions to "a large drug-store of the modern type," where he is supplied with four "tubes" of tabloids, each containing $\frac{1}{100}$ gr. of atropine, without question! Mr. Christie Murray probably wrote in good faith, but it would have been wiser if, before committing such dangerous statements to print, he had put the "loudly familiar man's" vapourings actually to the test. We take leave to assert that no such purchase could be effected under such easy-going conditions in any pharmacy—or even "drug-store"—in this country.

Manufacturing Opium-eaters.

The craze for sensation amongst London halfpenny papers carries with it real evils. This is well exemplified by the *Morning Leader* of June 12, which published an article on the "Champion Opium-eater," a man who

takes his $\frac{1}{2}$ oz. a day with a relish which leaves things like Worcester sauce and asparagus far behind. . . . If he feels downcast and moody in the vegetable-market at Stratford, he takes two or three pills of his favourite soother; and then the carrots and the turnips take weird and wonderful shapes in his imagination. Potatoes turn into fairies, and even a market porter smoking a cutty pipe becomes an Apollo Belvidere in the eyes of this Stratford dreamer.

It is difficult to imagine anything more likely than this to make people seek the solace of opium when they are depressed, and we are surprised that a newspaper which addresses chiefly the working classes has been so forgetful of its responsibilities. Happily the sale of opium is well guarded, and chemists and druggists act as a wholesome check to the incitement occasionally created by such articles as that from which we quote.

The Optical Controversy.

The *Lancet* of June 6 again dealt with the question of sight-testing and spectacle-fitting by persons who are not medical men. Mr. Aitchison seeks to correct some statements which attribute the discovery of astigmatism and the theory of accommodation to Young, and Mr. Lionel Laurence writes to say that "all discoveries in optics have been made by opticians—whether medical men or not is beside the question." The *Lancet* challenges Mr. Laurence to name a single discovery relating to the structure, optics, refraction,

or employment of the eye which has been made by an optician who was not also a medical man. We further gather that the term "oculist" is understood nowadays to mean a quack who sails under false colours by using a word which does not assert the possession of a medical qualification, and that "ophthalmic surgeon" is the preferable term for registered men.

A Box of Lozenges.

Is it possible, we wonder, to interest Mr. Labouchere, M.P., further in the Medicine-stamp Acts with the view to bringing them more into consonance with present-day views? A recent issue of *Truth* contains the following paragraph:

Having a cough, I went into a chemist's shop to buy some cough-lozenges. The chemist recommended some which were in a bottle, and which he said he had made himself. He, therefore, put some up in a box, to which he attached a label. I asked him what was the difference between this label and the label to which a Government stamp is attached. He replied that he did not know, except that one pays the tax and the other does not. Pursuing my inquiries, I learnt that labels on lozenges and such-like articles have to be sent to Somerset House, which decides whether they are free of the tax or not. It sometimes happens that the duty is claimed on a label when first sent, and not when it is sent again. The chemist bought, he said, his labels from a firm that had got them passed duty free at Somerset House, but if he printed one and sent it there, he thought that very probably he would not be equally lucky. There seems something wrong in all this.

There are a few slips in this paragraph, but it shows, on the whole, how a liberal-minded parliamentarian views matters.

Lucrative Suggestions.

At Bourneville, the works of Cadbury Brothers (Limited), there is a "suggestion scheme" for employés which appears to work for the benefit of both employers and employed. In each department, according to a writer in the *Midland Express*, and in the entrance-lodges and recreation-rooms "suggestion-boxes" are placed. To each box there is affixed a pad of numbered forms and a pencil. The inspired man or woman fills up the form with the working-number, the name, and the suggestion made, and drops it into the locked box, which is cleared every day. The slips are examined by a committee, consisting of a director, the works-foreman and his assistant, the engineer, the architect, the head of the office-staff, and the head of the wages-department, and each week they decide which shall be accepted and which rejected. The numbers of the slips received are posted, every effort being made to keep the names of the inventive employés secret, and at the end of each half-year awards are made. The prizes range from 10*s.* to 5*s.* for the men and 5*s.* to 5*s.* for the women. Many valuable suggestions are sent in, and during the last six months 1,710 suggestions were received from the male employés, 673 of which were accepted; 1,003 were declined, either because they were impracticable or had already been suggested; 34 are still under consideration. In the same period the women sent in 1,231 suggestions. Jealousy between foremen and forewomen and the employés under their charge is obviated by the secrecy observed, and by the fact that the former are not eligible for prizes. When the scheme (which comes from America) was first started, Messrs. Cadbury proposed to devote 80*l.* to prizes; but it is found that 150*l.* will be nearer the amount required. This is by no means money wasted, for the suggestions are money-saving and practicable; and Mr. George Cadbury, jun., told the *Express* interviewer that it is well worth while from a business point of view.

FRENCH HONEY.—The *Illustrated Scientific News* draws attention to the way in which the honey-industry has advanced in France during the last few years. In ten years the output of honey has increased from 7,000,000 kilos. to 8,500,000 kilos. The increase is due less to an increase in the number of hives than to the greater yield of each hive, which has now risen to about 500 grams, or 11 lbs., a hive.

Bankruptcies and Failures.

At the Bankruptcy examination of Mr. C. S. Leadbetter, dentist, at Manchester on Monday, June 15, the bankrupt attributed his failure, *inter alia*, to moneys paid in opposing the Bill for making it illegal to practise dentistry under the Companies Act, and the proposed formation of a company to take over his business. The liabilities were 507*l.*, and assets 46*l.*

Re ANDREW S. TAYLOR, Clive Street, North Shields, Northumberland, Wholesale Druggist.—From the Official Receiver's observations on this case, it appears that the receiving order was made on the petition of creditors presented on May 7, the act of bankruptcy alleged being the departure of the debtor from his dwelling-house on or about April 24. The Official Receiver has no information as to the debtor's whereabouts, but he has reason to believe that he was in England at a date subsequent to the act of bankruptcy above referred to. The debtor is described as a wholesale druggist, and resided at 12 Linskill Terrace, North Shields, and carried on his business at Clive Street, North Shields. In view of the fact that he has gone away, the Official Receiver has had a careful inventory and valuation of his estate made for the information of his creditors and for subsequent use. After making due deduction for loss on realisation, the value of the chattel assets, apart from book-debts, if any, in the opinion of the Official Receiver's valuer, is 378*l.* 0*s.* 4*d.* The Official Receiver has no idea of the amount of the liabilities. The debtor's books have not been written up since last October. The Official Receiver regrets that, owing to the debtor's absence, he is unable to give the creditors much information.

Re JAS. PHILIP KEELEY, Station Terrace, and 423 Lytham Road, South Shore, Blackpool, Lancs, Chemist and Druggist.—On June 12 a sitting for the public examination of this debtor was held at Preston. According to the accounts, the deficiency amounts to 58*l.* 6*s.* 1*d.*, and the debtor attributes his insolvency to "being made responsible for money stolen from my father's shop when I was acting as sub-postmaster." In reply to questions, the debtor said that the business had been his father's, the latter having paid 200*l.* for it. The condition on which he took up the managership was that he should be paid 35*s.* per week. He denied having said that when he applied for a Post-office branch the business was his own. A robbery had been committed at the premises, when 42*l.* belonging to the Post Office was stolen. As he had a guarantee of fidelity with an assurance company, he claimed that amount from them, and he was paid, but the company subsequently sued him for the amount. Thinking he had a good case, he (witness) went to law, but the case went against him, and he was mulcted in costs, which, with the judgment, amounted to over 58*l.* The examination was adjourned, the Official Receiver stating that there were several debts which the debtor had not included in his statement.

Re ASHMORE & SON, 38 Mincing Lane, E.C., and 44 Wall Street, New York, Produce and Commission Merchants.

A SITTING of the London Bankruptcy Court was held on Wednesday, before Mr. Registrar Giffard, for the public examination of Arthur H. Ashmore, Henry L. Ashmore, and Henry B. Ashmore, trading in partnership as above. The statement of affairs shows total liabilities 58,228*l.* 8*s.* 10*d.*, of which 10,577*l.* 19*s.* 6*d.* is expected to rank for dividend, and assets valued at 2,451*l.* 11*s.* 2*d.*, after deducting 76*l.* 1*s.* 5*d.* in respect of preferential claims. Mr. E. Leadam Hough, senior Official Receiver, conducted the examination; Mr. Muir Mackenzie appeared for Messrs. Brandt, Sons & Co.; and Mr. A. H. Carrington was briefed for the debtors.

Mr. A. H. Ashmore was first examined by the Official Receiver, and stated that in 1888 he was taken into partnership by his father. Seven years later Henry Leslie Ashmore became a partner, and in November, 1895, their father died, leaving his capital of 2,000*l.* in the business under terms that 4 per cent. interest thereon should be paid to the unmarried daughters. Henry Beckwith Ashmore became a partner in 1899. No capital was found by either partner on joining the firm, but witness had since put in 2,055*l.*, of which 1,000*l.* was borrowed from relatives, and Henry L. Ashmore had paid in 1,600*l.*, including 850*l.* obtained from his sisters last February. They traded until the end of February, when their credit was stopped. In January last they opened the New York office for the purposes of their trade in hemp. The firm's insolvency was caused by the excessive drawings of witness and Henry Beckwith Ashmore, and through losses sustained, chiefly in the early part of last year, on hemp, aniseed oil, gambier, and other produce, in consequence of the fall in market-prices. Profit-and-loss accounts were made out to the end of 1899, but not since then. It was only in February last that they became aware of the firm's insolvency, but, having regard to the losses sustained in the early part of last year, a deficit would doubtless have been shown had accounts been taken last June.

The magnitude of the firm's transactions had grown considerably during recent years, especially in 1901.

Asked regarding the money advanced by his sisters to H. L. Ashmore, the witness said Messrs. Dodge & Olcott, New York, had consigned goods to them for sale, and they had, instead, pledged them. Their solicitors advised that those goods must be released, and the moneys were advanced by their sisters for that purpose. Witness could not justify in any way the hypothecation of those goods. During the two and a quarter years since December, 1900, witness had drawn from the business 4,341*l.*, but against that he had paid in 1,055*l.*, which left his net drawings at 3,286*l.*, or at the rate of about 1,400*l.* a year. He had always considered that they were making a profit of between 3,000*l.* and 4,000*l.*, and his share was one-half, the other half belonging to his partners. Witness admitted that his expenditure had been even heavier than his drawings, and had, in fact, amounted to 2,000*l.* a year. There was no fixed rate of drawing observed, and it was not until the end of the year that they knew the exact amount drawn by each partner. It was the fact that the drawings of the three partners since October 1, 1902, had amounted to 1,725*l.* H. L. Ashmore's drawings since December, 1900, were 1,585*l.*, or, after allowing 850*l.* paid in by that partner, they were only 735*l.* The other partner, H. B. Ashmore, during the same period had drawn 4,313*l.*, including about 300*l.* for passage-money and other travelling expenses to and from New York. The last named partner's drawings were far in excess of what either of them anticipated.

Further replying to the Official Receiver, witness said Messrs. Wm. Brandt, Son & Co. were creditors for a considerable sum, which represented the unsatisfied balance of 7,500*l.*, the amount of acceptances given by that firm to witness's firm on January 20 last. The amount of the debt was not agreed, because the securities were valued on a different basis by the two firms. Messrs. Brandt were merchants and foreign bankers in Fenchurch Street Avenue. Witness asked them to accommodate his firm with the bills for 7,500*l.*, and offered security in the shape of peppermint oil and aniseed oil in course of shipment to New York. The securities offered were valued at 7,650*l.*, but only 109 cases of oil were released from the brokers. Witness's firm valued them at 3,458*l.*, but Messrs. Brandt at only 2,000*l.*

Mr. Hough inquired whether those 109 cases were not released with the proceeds of the 7,500*l.* bills obtained from Messrs. Brandt.

Witness replied that the proceeds went into general account. On January 20 they had a balance of 3,100*l.* before the bills were credited to them. On that or the following day they paid 5,000*l.* to Messrs. Dodge & Olcott, 1,185*l.* to Parr's Bank, and nearly 6,000*l.* to various other firms. A sum of 1,075*l.* was paid to their credit on January 21, but it was apparent that but for the assistance of the 7,500*l.* bills the whole of the above-mentioned payments could not have been made. None of those payments had any relation to the goods offered as security to Messrs. Brandt. An exception might probably have to be made in the case of Parr's Bank.

Mr. Hough referred to correspondence between the firm and Messrs. Dodge & Olcott, in which the former promised on January 14 to pay 5,000*l.* to Messrs. Brown, Shipley & Co. on account of the latter, and pointed out that the payment was not made before January 20. He asked, "Did you not get the advance from Messrs. Brandt in order to pay the 5,000*l.* to Messrs. Brown, Shipley & Co.?"

Witness replied that was not the intention, although he admitted that the payment could not have been made without the assistance of those 7,500*l.* bills.

The Official Receiver: Do you think you were justified in using the proceeds of those bills in the way that you did?—I do not think so now, but I did not then know we were insolvent. My intention was to carry through our contract with Messrs. Brandt & Co.

Which was to release and ship goods to the full value of the 7,500*l.*?—The contract-letter was badly worded.

But the result of what you did is that Messrs. Brandt are now unsecured creditors, according to your own admissions, for certainly one-half of the 7,500*l.*, and, according to their view, for a considerably larger sum?—Yes.

In reply to further questions, the witness said he was solely responsible for the conduct of the firm's financial operations; his partners knew nothing about them.

Mr. Muir Mackenzie questioned the witness regarding the assignment of a policy for 3,000*l.* on his life to his sister in February last. The debtor explained that the assignment was effected by his brother under a power of attorney whilst he was away in America, but the assignment was prepared so far back as 1901. It was in consideration of a loan of 2,000*l.* to witness.

The firm did a good deal of business with Messrs. Dodge & Olcott, one part being the consignment of goods to witness's firm for sale. The cheque for 5,000*l.* drawn in favour of Messrs. Brown, Shipley & Co. was dated January 17, but it was not sent out until January 20.

Mr. Muir Mackenzie: Did not you represent to Messrs. Brandt & Co. that you required the advance of 7,500*l.* in order to clear

goods so that you might ship them?—I do not think I said anything to them about clearing goods.

What did you say you wanted the money for?—To ship the goods.

Did you tell Messrs. Brandt that any of the goods were in pledge?—No.

Re-examined by Mr. Carrington, the debtor said that out of the 7,500*l.* advanced he took up 3,000*l.* worth of goods, but he left for America before the first lot was shipped. There were other moneys coming into the business, and it was the intention out of such moneys to take up the rest of the goods. Whilst witness was in America a cable was sent out by Messrs. Brandt stating that Ashmore & Son were in financial trouble. That cable practically ruined them, because the brokers subsequently sold without a margin, and witness's firm lost the 25 per cent. which they would otherwise have received. But for that cable the firm would have been perfectly able to take up the rest of the goods. When matters came to a crisis witness tried to get financial assistance by raising money on his wife's life policy, but a difficulty was raised in connection with the marriage settlement, and the loan was not forthcoming.

Mr. H. L. Ashmore was also examined, and explained that he only heard of the Brandt transactions in the middle of February, at which time the last witness was in America. He, personally, took no part in the firm's financial transactions, but devoted himself to the market work. Upon hearing of the Brandt business, he went round to their office, and signed a letter charging his firm's interest in certain goods. His solicitors afterwards advised him that he ought not to have signed that letter. It was after he had signed it that Messrs. Brandt cabled to America and precipitated the crisis. The creditors were eventually called together, and agreed to an arrangement; but Messrs. Brandt & Co. refused to come in under it, and witness's firm decided to file their petition.

The examination of the two witnesses was ordered to be concluded; but that of the other partner, H. B. Ashmore, who was stated to be in Paris, was adjourned for a fortnight.

Deed of Arrangement.

Re WILLIAM DARNLEY TAYLOR, trading as the Hightown Chemical Company, Liversedge, Chemical-manufacturer.—The trustee (Mr. Isaac Henry Skinner, of 24 Bridge Street, Bradford, Yorks), under the deed of assignment, announces that claims against the estate must be sent to him by July 11.

Gazette.

Partnerships Dissolved.

Brown, E., and Jacobs, G., under the style of the Food Antiseptic Company, College Place, St. Ann's Hill, Wandsworth, S.W., food-preservative manufacturers.

Fisher, F. C., and Williams, D. C. L., under the style of Fisher & Williams, King's Langley and Abbot's Langley, Herts, general medical practitioners.

Saunders, J. T., Saunders, A. J., and Saunders, P. T., under the style of James Touzeau Saunders, Oxford Street, W., wholesale perfumers; so far as regards P. T. Saunders.

Wells, A. P., and Blake, W. H., under the style of Primrose, Wells & Blake, Beckenham and West Wickham, Kent, general medical practitioners.

The Bankruptcy Acts, of 1883 and 1890.

RECEIVING ORDER.

Harrison, Benjamin, Oldham, soap-manufacturer.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Williams, William (otherwise William Robert Williams), Machynlleth, Montgomeryshire, physician and surgeon—discharge granted conditionally.

GLYCERIN occurs in normal blood. Niclonx has found 1.9 to 2.5 milligrams in 100 c.c. of dog's blood, and 4.2 to 4.9 milligrams in 100 c.c. of guinea-pig's blood.

SITUATED in the vilayet of Sivas, near Karahissar, is a rich mine of alum worked by the Turkish Government. About 2,000*l.* Turkish are exported annually to other provinces.

New Companies & Company News.

IMPAVIDE (LIMITED).—Capital 10,000*l.*, in 1*l.* shares. Objects: To adopt an agreement between G. E. S. Watson and E. Ward to acquire the business carried on at Knott's Green, Leyton, as "Impavide," and to carry on the business of manufacturers of ginger-beer, aerated and mineral waters, and other drinks, &c. No initial public issue. C. E. Pilling is permanent managing director, with power to appoint other directors; remuneration, 260*l.* per annum. Registered office, White House, Leyton.

EDWARD GORTON (LIMITED).—Capital 10,000*l.*, in 1*l.* shares (4,000 5-per-cent. cumulative preference). Objects: To adopt an agreement with E. Gorton for the acquisition of the business of a glue, size, gelatin, tallow, manure, and chemical manufacturer carried on by him at Paddington, in the township of Poulton-with-Fearnhead, Lancs, and to carry on the same and any kindred business. No initial public issue. The first directors are E. Gorton (chairman), Mrs. E. Gorton, and A. Bimson. Qualification 50 shares.

BIRSTAL SOAP COMPANY (LIMITED).—Capital 2,000*l.*, in 1*l.* shares. Objects: To adopt an agreement with W. S. Farnell to acquire the business carried on at Birstal as Smith Brothers, and to carry on the business of hard and soft soap makers, makers of soap-powders, extracts, and packet soaps, chemical manufacturers and merchants, drysalts, and manufacturers of and dealers in sal ammoniac, muriate of ammonia, nitric and hydrochloric acids, &c. No initial public issue. W. S. Farnell is permanent governing director. Special qualification 400*l.* Registered office, Smithies, Birstal, York.

CHARLES JAMES HILL (LIMITED).—Registered in Dublin. Capital 6,500*l.*, in 1*l.* shares. Objects: To acquire and carry on the business of a patent-medicine vendor, drug-merchant, egg-merchant, fish- and poultry-merchant, grocer, &c., carried on in Waterford under the style of "Charles J. Hill." The first subscribers are: C. J. Hill, Belmont Lodge, Waterford, merchant; A. W. Morris, 4 Morley Terrace, Waterford, accountant; Mrs. M. Hill, Belmont Lodge, Waterford; Miss J. Hill, Belmont Lodge, Waterford; Miss S. Hill, 2 Harold Villas, Harold's Cross Road, Dublin; F. L. Hill, 65 Leinster Road, Rathmines, Dublin, commercial traveller; and W. Hill, Belmont Lodge, Waterford, accountant. The first directors are C. J. Hill, F. W. Hill, and W. Hill. Qualification, 20*l.* Remuneration as fixed by the company.

CLAYTON ANILINE COMPANY (LIMITED).—The directors recommend a dividend of 5 per cent., leaving 1,352*l.* to be carried forward.

IDRIS & CO. (LIMITED).—An interim dividend of 3 per cent. on the preference shares of this company on account of the dividend for the year ending October 31 next has been declared.

SHEFFIELD MINERAL-WATER SYNDICATE.—The report of this syndicate states that the trade profit for the year, after maintaining the properties and plant in a good state of repair, and providing for depreciation and all charges, is 853*l.*, but after payment of 2,246*l.* for debenture interest, there is a deficiency on the year's working of 1,392*l.*, to which must be added the loss brought forward from last year 1,102*l.*, making the debit to profit-and-loss 2,495*l.* The loss on the year's trade is owing to a serious reduction in the turnover, principally caused by the unusually cold season and by increased competition and the depressed state of trade.

BRANDRAM BROTHERS & Co.—This company, which manufactures white-lead, sulphur and saltpetre, appears to the *Financial Times* to be still sound enough at bottom if only conducted on energetic modern lines. The committee of investigation think the flotation in 1893 was quite an honest one, and though the capitalisation was somewhat too high, they do not suggest any reduction. They recommend, however, that voting-rights between the ordinary and preference shares should be more equalised, that the board should be strengthened by the introduction of someone of general commercial experience, and that a fund for the equalisation of dividends should be formed. It is also proposed that certain unwise litigation be compromised, and that an immediate outlay on new plant be made. The company lost 4,000*l.* in 1901, a deficit which was just about wiped out by last year's earnings, but there are still two years' preference dividends to make good.

Dental Notes.

ARSENIC-PASTE.

THE following mixture, according to the *Pharm. Zeitung*, is said to be an improvement over others used heretofore :

Acoin	2.0
Distilled water	6.0
Arsenious acid	1.0
Cobalt (powder)	1.0
Glycerin	0.5

Dissolve the acoin in the water, and incorporate the other ingredients.

ETHYL CHLORIDE ANÆSTHESIA.

ETHYL CHLORIDE is coming into use as a general anæsthetic, the period of unconsciousness lasting from thirty seconds to two minutes. The method of administration is as follows: A cone is formed and covered with paper, and into this cone from $\frac{1}{2}$ dr. to 1 dr. of ethyl chloride is poured. This is placed over the patient's nose and mouth, and he is told to breathe deeply. In fifteen to thirty-five seconds complete anæsthesia is accomplished without any muscular spasm. If the anæsthetic is then withdrawn, recovery takes place within the minute. If the drug is continued, there is in a few seconds more complete muscular relaxation and abolition of the corneal reflex. The anæsthesia lasts about three minutes. If required to be more prolonged, a fresh dose of the drug is given as soon as the patient begins to recover consciousness. Recovery is extremely prompt, there is no headache, no vomiting, and in a few minutes the patient is able to get up and walk.

BLEACHING TEETH.

MR. HERBERT C. MILLER (*Dental Cosmos*) uses several methods of bleaching discoloured teeth. The rubber dam is applied to the tooth, and as much of the discoloured dentine is removed as can be done without weakening the tooth too much; wash the interior dry with hot air and use one or other of the following processes: (1) Apply 25 per cent. hydrogen peroxide upon cotton, lint, or bibulous paper to the interior of the tooth or to any surface that is to be bleached, then direct hot air upon the solution, or a hot instrument, which not only causes the more rapid decomposition and liberation of oxygen, but also steams the tooth, thus hastening the process of bleaching. Hydrogen peroxide may also be placed in a tooth upon cotton or lint and sealed with guttapercha and left from one to three days. A small vent may be made through the guttapercha. (2) Introduce dry powdered potash alum into the tooth or pulp-chamber, then apply upon cotton or lint a freshly-made solution of chlorinated soda. In the reaction which takes place chlorine is given off; but it is not the chlorine that does the bleaching, it is the nascent oxygen that is liberated by the action of the chlorine on the water molecule, which oxidises and makes soluble the colouring-matter so that it can be washed out. (3) Introduce chemically-pure aluminium chloride into the tooth, then apply fresh solution of chlorinated soda, when nascent oxygen is liberated, which renders the colouring-matter soluble in the same manner as in the other processes. A 5-per-cent. solution of hydrogen dioxide may be used in place of the chlorinated-soda solution. (4) Wipe out or moisten the interior of the tooth with a chemically-pure 6 or 8 per cent. solution of sulphuric acid, then introduce dry sodium dioxide into the tooth, when oxygen will be liberated and attack the colouring-matter and render it soluble, so that the dissolved matter can subsequently be washed out, which completes the process.

DURATION OF ANÆSTHESIA.

THE committee of the Odontological Society found the average time occupied in inducing anæsthesia by nitrous-oxide gas to be seventy-three seconds, and the average length of anæsthesia obtained to be 24.7 seconds. Dr. R. W. Collum, in the *British Dental Journal*, finds that with somnoform these averages are forty seconds and sixty-eight seconds respectively; in other words, while the time of induction is considerably reduced, the working anæsthesia is increased to nearly three times the length of that obtained by gas.

CHECKING WEIGHT OF GOLD.

MR. W. M. GABRIEL, L.D.S., contributes to the *British Dental Journal* a note on the conversion of fractions of an ounce, expressed decimally, into troy weights. In checking the weight of gold for tooth-stopping the method is useful. The first figure to the right of the decimal point (representing, as it does, tenths of an ounce) is doubled, this giving the number of pennyweights. If, however, the next figures are over 50, 1 is added. The second and third figures are next divided by 2, this giving the number of grains. If, however, they are over 50, and 1 has been added to the number of pennyweights, 50 is subtracted before division. The method is not absolutely correct. It assumes 25 gr. to the pennyweight in place of 24, and consequently 500 gr. to the ounce in place of 480. The error, however, is so slight, being only a fraction of a grain, that the results are sufficiently accurate for any dentist's requirements.

DO DUMMY TEATS CAUSE DENTAL IRREGULARITIES?

THIS was one of the questions discussed by Dr. R. Arthur in a paper before the Odontological Society of New South Wales. Thumb-sucking is now out of date, owing to the advent of the dummy teat or infant-comforter, and it is at present the fashion to ascribe a multitude of dental irregularities to the comforter. These, Dr. Arthur considers, are unjustified. It is hard, he says, to see how it could be otherwise. As the youthful offenders begin the habit, either natural or artificial, immediately after birth, one would argue, from the *a priori* standpoint, that all these children should very early show high palates and superior protrusion of the deciduous teeth. But experience teaches that they never do. The arched and contracted palate is never seen before the sixth year, and it is the permanent teeth which protrude, while, as a rule, the habit of sucking something is abandoned in the second or third year. Many inveterate thumb-suckers have perfect jaws, while dental irregularities are often found in children who have never acquired the habit. It is also noted that the production of adenoids by the use of dummy teats is quite as wild a charge.

LOCAL ANÆSTHETIC.

MR. W. T. WYCKOFF, in the *Dental Brief*, gives the following as a good formula for a local anæsthetic:

Cocain. hydrochlorid.	gr. v.
Liq. trinitrin. (1 per cent.)	℥x.
Spirit. thymol. comp.	5ij.
Aq. dest. ad	3j.

Use a good strong hypodermic syringe with heavy finger-pieces and short needle, reinforced with very short point. Absolute cleanliness of the syringe must be observed in all cases. Saturate a small piece of absorbent cotton with the obtundent, and apply at the point where the first insertion of the needle is to be made. Insert the needle just far enough to cover the opening in the point; press the piston gently, and as the parts whiten, increase pressure on both needle and piston. Should the muscular tissue be pierced and cause the gum at the apex of the root to puff, keep the needle in place and rub the finger over the puffed surface to spread the fluid. The next insertion should be made near the outer edge of the affected tissue, which by this time has a white appearance. Then repeat the operation until the buccal or labial portion is fully affected. Next pass the needle through the soft tissue between the teeth at the neck, pressing the piston gently, that the effect of the obtundent may be felt in advance of the needle. When the palatal portion is reached, proceed to inject there thoroughly, from neck to apex. In about two minutes extraction can be made, or, where several teeth are to be extracted, by the time four or five are prepared, the first will be ready. It is advisable, in case the patient is susceptible to cocaine, to have at hand cocaine antidotes, such as amyl hydrate, ammonia, sal volatile, caffeine, and ether.

TO USE ADRENALIN CHLORIDE.

As a hæmostatic adrenalin chloride acts well when applied thus: Saturate a pledget of cotton with the solution, place over the surface to be treated, press the nozzle of a chip-blower firmly against the cotton, and force air through a few times. Cocaine may be forced into tooth or soft tissues very readily in the same way.—*Dental Cosmos*.



TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

Mr. Ekins.

SIR,—Please enable me to draw attention to some solecisms by Mr. Ekins, ex-Mayor of St. Albans, in connection with the liniment-of-soap case. I make no comment on the case itself, for it is *sub judice*. When a Pharmacopœia or an Addendum thereto is published its editor *ipso facto* has ceased editing, therefore has ceased to be editor; it is neither usual nor polite subsequently to speak of him, ambiguously, as editor "no longer." When an editor or a research-reporter, or even the Mayor of a town, is not re-elected on a future occasion and does not seek re-election, it is neither usual nor polite to speak of the official as being "got rid of." It not only is unusual and impolite, but outrageous to speak of an editor—who has nearly reached threescore years and ten, who has beaten the record of British Pharmacopœia *plus* Addenda engagements as editor, and who as a research-reporter has created a ten-year record—as being an official who, according to one report of the soap-liniment case, "has been got rid of, I believe, because he is not now considered an authority," or, according to another report, "had been an authority, but had now been got rid of because he was of no use."

Yours faithfully,

Watford, June 16.

JOHN ATTFIELD.

Not Enough.

SIR,—The following is a cutting from a pamphlet now being circulated in this town by the Williams Medicine Company:

Buy the Pills at the Chemists'.

Lancashire Chemists are the most honest and most highly educated business people in the world. Ask distinctly for Dr. Williams' Pink Pills for Pale People and the honest chemist will not attempt to sell you a substitute.

Price 2s. 9d.; Six boxes 13s. 9d. But they cure—they do not purge.

My theory is that if the company would guarantee a living profit on their medicines the motive for substitution would vanish completely and such warnings would be absolutely unnecessary.

As a Lancashire chemist I appreciate the most excellent testimonial, but wonder what ex-Lancashire chemists think of their abilities and honesty as compared with ours.

Yours faithfully,

Accrington, June 17.

WALTER FURNESS.

What Next?

SIR,—Recently I had the following prescription brought in:

Potass. iodid.	...	...	...	5iij.
Spt. ammon. co.	...	...	...	5ij.
Inf. gent. co. conc.	...	...	...	5j.
Tr. cinchonæ co.	...	...	...	5ij.
Aq. chloroformi ad	...	...	...	5vj.

M.

3ss. ter die.

Upon stating that the price would be 1s. 5d., I was told that they never gave more than 8d., no, never! anywhere! and as I respectfully declined to make it at this price it was taken away. This and previous experience has taught me that the public, having noted the dissensions in the trade, endeavours to profit thereby by making statements which cannot be true, as a careful calculation of the retail price of each ingredient comes to more than the price mentioned, without any payment for the time occupied and care taken to compound it correctly.

Yours truly,

C. & D. (59/33)

A Contradiction.

SIR,—In THE CHEMIST AND DRUGGIST, June 6, under the head of "The Week's Poisonings," you refer to the death of a Chesterfield tradesman named Hobson, and my name is mentioned as having advised him to take and as having sent him a bottle containing morphine. However the report may have originated, it is quite untrue, as Mr. Hobson never at any time mentioned his insomnia to me nor did I ever promise to send him any morphia or anything of that nature, or have I ever taken any order from him for any article containing morphine. I was not present at the inquest—in fact, my first intimation was seeing the account in the papers.

Yours faithfully,

Kirkstall, Leeds, June 12.

R. GAY WILLOUGHBY.

Doctor's Prescriptions.

SIR,—In view of the aspersions recently cast upon the "prescribing chemist" by a rural Coroner, I beg to enclose the emanations of a prescribing doctor, with the idea of asking the more scientific of your readers what therapeutic effect would result from a course of medicine dispensed in accordance with his directions? It may be well to state that the patient, though still living, is suffering from gastric derangement.

I am, yours faithfully,

JOHN G. AGAR.

Two of the prescriptions suffice to show the style. Mr. Agar has been good enough to transcribe them from the originals (also sent), which is no mean task, considering the slovenly writing of the prescriber:—

Sodæ bicarb....	...	gr. 160	Sodæ bicarb. ...	...	3iv.
Potass. bicarb.	...	3iv.	Potass. bicarb.	...	3vj.
Sod. salicyl. ...	...	gr. 160	Sodæ salicylat.	...	3iv.
Pulv. ipecac....	...	gr. iv.	Pulv. ipecac. ...	...	gr. vj.
Ess. zingib. ...	...	5j.	Sodii bromid. ...	...	3iv.
Tr. aurantii ...	...	3vj.	Ess. zingib. ...	...	3iss.
Spt. chloroformi	...	3iij.	Tr. aurantii ...	...	3vj.
Ac. hydrocyan. dil.	...	m64	Spt. am. arom.	...	3iv.
Ac. carbol. pur.	...	gr. 16	Ac. carbol. pur.	...	gr. 18
Bismuth. subnit.	...	gr. 160	Ac. hydrocyan. dil.	...	m96
Tr. nuc. vom.	...	3iiss.	Tr. hyosey. ...	...	3vj.
Liq. arsenicalis	...	m54	Potass. nit. ...	...	3iij.
Inf. calumb. ad	...	3viij.	Inf. buchu ad ...	...	3xij.

3ss. c. 5j. fresh lemon-juice
and a little water three times a
day midway between meals.

3ss. c. 3ss. aq. et 5j. succ.
lemon. recent. ter die inter
cibus.

Standing Prescriptions.

SIR,—May I suggest the advisability of dispensing chemists stamping prescriptions upon the back? I have always adopted this plan myself, but the desirability of it was further shown by a prescription handed in the other day. The prescription was pretty well "stamped," and one dispenser in his eagerness to be "on the front" had stamped over the quantities of the ingredients with a thick smudgy rubber stamp, entirely obliterating the amount of one ingredient. This extreme carelessness is, happily, not common, but still it is no uncommon thing to see ingredients stamped over in a most ruthless manner. I believe the late Mr. Lennox Browne used to mark his note-paper with directions to the dispensing chemist "Please stamp on the reverse side." This advice has much to commend it, and it would be a good thing if chemists acted upon it.

Yours faithfully,

Doncaster, May 26.

W. E. PLANT.

Legal Queries.

Consult "The Chemists' and Druggists' Diary," 1903, before formulating Queries.

66/44. *Kikitok*.—As a preparation of nux vomica, Tilbu y Fox's hair-lotion should be labelled "Poison." It may only be sold by chemists and druggists.

67/24. *J. J.*—You appear not to be aware that the decision in regard to the naming of remedies does not apply to those which are entire drugs and not mixtures. These are exempt from stamp-duty when sold with a recommendation or dutiable name by qualified chemists and licensed stamped-medicine vendors.

59/73. *J. H. C.*—"Diseases and Remedies" and "Pharmaceutical Formulas" are well-known books of reference. You may safely refer to them on labels.

67/46—*Keystone*.—In England and Wales notice to determine a yearly tenancy has to be given six months before the end of the year. In your case notice has to be given this month.

59/15. *Safe Side*.—You state that the teething-powders "are not a patent medicine, and do not require any stamp or licence." If they consist of a single drug unmixed with anything else they may be sold unstamped, as stated in reply to "J. J."; the Sanguinetti and Glyn-Jones decisions do not apply.

62/10. *W. H. B.*—Registered medical practitioners probably benefit under the *Farmer v. Glyn-Jones* decision.

68/40. *More Light*.—A slide-box is an enclosure within the meaning of the Medicine-Stamp Acts, and if dutiable pastilles are put up in them the boxes must bear a stamp appropriate to the price at which they are sold. The fact that the pastilles are bought in 1-lb. stamped bottles does not relieve the retailer from re-stamping the small quantities sold.

66/30. *Ipecac*.—The agreement as to starting in business is a sound one, and if violated the penalty, or part of it, can be recovered. The object of the penalty was to prevent one party to the agreement starting in business within a certain radius, or to permit him to do so on the terms stated. The latter may, therefore, be taken advantage of should a good opportunity arise.

68/13. *Medicus*.—The arrangement by which you were to pay the assistant 5*l.* on condition that he did certain things did not carry with it a payment by him of 5*l.* if he did not.

68/61. *W. F. F.*—Your suggestions in regard to pill-labels were mostly covered by what we said last week. We have your other suggestion under consideration. Distilled extract of witch-hazel is one of the exempted remedies when recommended, because the formula appears in the British Pharmacopœia, and the Board of Inland Revenue have decided to regard all B.P. preparations when described by the official names as coming within the exemption. If sold by qualified chemists the stock label hitherto in use and bearing a recommendation may be employed, provided it is stamped, "Prepared according to the British Pharmacopœia." Your suggestion to use small slip labels similar to poison labels is good. The wording may be as follows:

This preparation is made in accordance with the "British Pharmacopœia" directions.

The name of any other book of reference may take the place of "British Pharmacopœia"—*e.g.*, "Pharmaceutical Formulas."

64/28. *J. L.*—Your suggestion was substantially embodied in the article in our issue of June 13, and the matter is not being lost sight of.

56/45. *Inquirer*.—An assistant cannot demand a *fort-night's* holiday or equivalent in salary, but it has been held that he is entitled to a holiday.

59/6. *Portsmouth*.—Both your labels are liable to stamp-duty¹

60/35. *Doubter*.—Sulphur-and-sarsaparilla salt which is effervescent and does not contain sarsaparilla is presumed to come within the section repealed by the 1833 Act—that is to say, the salt is "a composition for the purpose of compounding an artificial mineral water impregnated with soda or mineral alkali or carbonic-acid gas." The Board of Inland Revenue do not regard effervescent preparations, used as a vehicle for administering medicines which are not soda or mineral alkali, as coming within the definition. In Lamplough's case the Courts were satisfied that the medicinal or antifebrile ingredient (potassium chlorate) was a "mineral alkali." Whether they would so regard sulphur is another question. Few, if any, of the sulphur-and-sarsaparilla salts are recommended for the prevention or cure of ailments, so that the foregoing considerations do not always arise.

60/22. *J. N.*—Your label was one of those mentioned last week as liable.

59/62. *Jenz*.—In the case of popular cough-mixtures and the like prepared according to local formulae, it will suffice to use labels such as that which you send, viz.:

THE MIXTURE.

One teaspoonful to be taken three times a day.

In this case the ingredients need not be stated, as the name of the ailment is not used.

67/1. *Inquirer*.—The effect of the decisions in the Sanguinetti and Glyn-Jones cases is, in regard to the naming of remedies according to the ailments, that unqualified persons and limited companies rank with grocers and small shopkeepers, and cannot sell such medicines as cough-mixtures, stomach-pills, headache-powders (compound), and the like, without stamping them. The fact that you have been in business on your own account for twenty-seven years does not make you a "qualified chemist" in the eyes of the law, and it is only qualified chemists, apothecaries, and surgeons to whom the exemption as to non-stamping extends.

55/51. *H. R. H. H.* complains that his neighbour, a cycle-manufacturer, has set up a forge and gas-engine against the wall of "H. R. H. H.'s" sitting-room, and when certain kind of work is being done the vibration and noise are very annoying. Our correspondent's lease states that he is to have peaceable and quiet possession of his premises, and there is a clause in the cycle-maker's lease that he is not to interfere with his neighbour's comfort. Neither the landlord nor the local authority will move in the matter. ["H. R. H. H.'s" course is very simple. He is entitled to an injunction to restrain the cycle-maker from making his house uninhabitable. The only point is whether "H. R. H. H." can satisfy the Court that the conduct of his neighbour has seriously affected his comfort. The proper course is to commence an action for an injunction and to add the landlord as a co-defendant, although the latter course is rather risky. Probably, however, when the cycle-maker gets the writ, he will see his duty towards his neighbour in an altered light. The prospect of a long bill of costs is generally found to be a strong moral stimulant, and our correspondent must either elect to put up with the annoyance or take the bold course. The covenant for quiet enjoyment in his lease does not affect the matter unless the landlord is the same for both houses.]

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

61/24. *Omega*.—Amyl oxyhydrate is amyl alcohol; ammoniak is the German way of putting liq. ammoniæ. Centrifugen oel we do not know.

46/9. *Temporibus*.—The method of Colouring Cut Flowers consists in putting the stalks into aqueous solutions of aniline dyes. The solutions used are dilute, but no particular strength is needed.

46/53. *W. E. F.*—The formula for lin. terebinth. in the B.P. meets your request for a "white inseparable" soap-iniment."

58/28. *W. A. B.*—Optical Examinations.—See *C. & D.* Educational Number, September 6, 1902, page 454.

61/34. *A. C.*—Combined Bath.—The formula published in the *C. & D.*, May 2, page 727, at first throws down a precipitate of lead sulphide, and if the gold chloride is added before the precipitate has settled it will be partly thrown down. This is why in the recipe the solution has to stand two days (a week would be better) before adding the gold.

60/39. *Pall Mall*.—The plant you send is the rock-rose, *Helianthemum vulgare*, N.O. *Cistaceæ*.

63/65. *Nemo*.—Sodium sulphite is required in the pyro-formula.

67/15. *Business*.—The ext. pareiræ liq. is the source of trouble in your backache-and-kidney mixture. Replace it with succ. scoparii or dec. scoparii, and use aq. chloroformi (B.P., 1885) in place of aqua dest.

67/55. *Metaphor*.—A lotion of formaldehyde (1 of 40-per-cent. solution in 10) would probably be best for the case of excessive perspiration.

65/38. *W. J. R.*.—Hire of Camera.—The charge is 5 to 10 per cent. of the cost of the camera per day, with a reduction in these charges for a week or month. For instance, a camera for which the charge is 2s. 6d. a day would be let out at 7s. 6d. a week or 15s. a month.

43/35. *Salol*.—Whitening the Hands.—We cannot add to the remarks on this subject in "Pharmaceutical Formulas."

30/23. *Kappa*.—(1) The use of a tragacanth or quince bandoline is indicated in the case you mention. (2) You might certainly experiment with new flavours for cod-liver oil emulsions. The soluble essences, such as are used for aerated waters (you will see them advertised in the *C. & D.*), afford a variety of fruity flavours.

205/40. *J. E. S.*.—The liquid gum sold in bottles is generally a dextrin mucilage. Several recipes are given in "Pharmaceutical Formulas."

46/72. *C. C.*.—To obtain the contents of a round cistern the rule is to multiply half the diameter by half the circumference and the result by the depth. This gives the cubic measure, from which calculate $6\frac{1}{4}$ gals. to the cubic foot.

61/11. *A. B.*.—Bone is decalcified for surgical purposes by immersing in 5-per-cent. hydrochloric acid, fresh acid being used three or four times a day, until the bone becomes soft. The decalcified bone is then washed in running water for several hours, and finally in rectified spirit, in which fluid it is usually stored.

12/6. *Tonic*.—Glycerin slowly decolourises quinine-and-iron tonic, especially when exposed to a strong light. You can replace the glycerin with syrup.

66/36. *C. M. B.*.—Optical Examinations.—We gave particulars of these in the Educational Number of the *C. & D.*, September 6, page 454. The syllabus of the Spectacle-makers' Company can be had from Colonel T. Davies Sewell, 11 Temple House, Temple Avenue, E.C., and that of the British Optical Association from the Secretary, 17 Shaftesbury Avenue, W.

66/51. *Eson*.—(1) An equivalent quantity of terpeneless oil of lemon to use in place of oil of lemon would be a twentieth, as the oil contains about 95 per cent. of terpenes. (2) It is not illegal to use boric acid in milk, but there may be trouble in some districts, according to the fancy of the analyst. The Departmental Committee on Preservatives recommended that the addition of preservatives to milk be prohibited, but it may be years before the recommendations are given effect to.

40/38. *Motor*.—(1) Cycle-frames are enamelled by painting with an asphaltum varnish, stoving, and sand-papery, the process being repeated two or three times. The final polishing is by means of rottenstone and oil. (2) *Tan-boot Polish*.—A good recipe was given in the *C. & D.*, October 23, 1902, page 717, and others will be found in "Pharmaceutical Formulas."

37/7. *W. R.*.—There is no book published on the manufacture of soluble essences besides "Pharmaceutical Formulas."

48/27. *Ajax*.—You cannot well improve on the formula for effervescing Carlsbad salts. The bottles burst because either the bottles or the salt are damp.

60/60. *Soda*.—(1) *Weed-killer*.—Arsenic is made soluble in the concentrated liquids by the use of caustic soda or potash. If you conduct a few experiments on test-tube quantities, you will soon find out the limits of concentration. We do not know the exact strength of the preparation you name. (2) A blue colour can be given by the addition of a water-soluble aniline-blue.

256/31. *W.*.—(1) Japan wax is a vegetable product, and cannot be used in official preparations in place of beeswax. It is used in the manufacture of boot and furniture pastes. (2) You do not state what your interest in the intestate's estate is. Is a debt owing to you?

132/27. *Radix*.—Most of the brown aniline-dyes are suitable for colouring boot-paste. You can omit the linseed oil from the formula you mention, but the soap is a necessary ingredient.

55/28. *Pater*.—The turnover of a business is the sum of the cash sales and the credit sales. The percentage of net profit of a chemist's business varies so much that it is not possible to fix an amount that is "usual."

60/61. *Nemo*.—Calcium sulphide is readily decomposed, and on that account is best given by itself in a coated pill. It must not be given in a pill with pil. hydrargyri, as the sulphuretted hydrogen evolved would act on the mercury.

Information Wanted.

64/30. Makers of "Big G Injection."

18/6. Makers of Brandt's Extract of Malt.

63/38. Who are the proprietors of Froissart's Tobacco Extract?

Coming Events.

Tuesday, June 23.

Royal Photographic Society of Great Britain, 66 Russell Square, W.C., at 8 P.M. Dr. Chas. F. Grindrod will open an exhibit of his work and deliver a short address. The exhibition will remain open during the summer between the hours of 10 A.M. and 7 P.M.

Wednesday, June 24.

London Chemists' Association, Holborn Viaduct Hotel, at 3 P.M. Annual general meeting. Notice of the following subjects and motions for discussion has been received: "Territorial Representation," by Mr. W. M. Campbell; "The Fraud of the Label," by Mr. J. C. Pentney. "That a committee be formed to promote the Federation of Chemists' Associations in and within fifty miles of London."—Mr. G. P. Pond. "That a representative committee be formed for the consideration of the Pharmacy Act Amendment Bill."—Mr. J. C. Pentney. Mr. R. B. Betty has given notice that he will propose the following addition to Rule 3: "The General Purposes Committee shall be empowered to elected honorary members of the Association."

Friday, June 26.

Edinburgh Chemists', Assistants', and Apprentices' Association. Botanical excursion from Waverley station by 8.15 P.M. train for Inveresk, returning from Musselburgh at 10.15 P.M.

THE annual meetings of the P.A.T.A. and C.D.A. will be held at the Holborn Viaduct Hotel, London, on Tuesday, July 14, the P.A.T.A. meeting being at 2.30, and the C.D.A. meeting at 4.30 P.M. On the following day, Wednesday, July 15, a trip down the Thames from Reading to Windsor has been arranged. The party will leave Paddington at 9.35 A.M., arriving at Reading at 10.19. A steam-launch will await the party at Caversham Lock, and will proceed thence to Henley, where a stop will be made for luncheon. After luncheon the journey will be continued to Windsor, tea being provided on board the launch. The party will leave Windsor by the 8.25 P.M. train, reaching Paddington at 9.5 P.M. Inclusive tickets are 10s. 6d. each, but to those wishing to make use of the boat-trip with luncheon and tea only tickets will be 7s. 6d. As the number of tickets is limited to the number the launch will take—namely, 150—an early application is necessary. Already half the number of tickets have been applied for.

Pharmaceutical Society of Great Britain.

NORTH BRITISH BRANCH.

A MEETING of the Executive of the North British Branch was held in Edinburgh on June 18, Mr. Peter Boa in the chair. The first business was the adjourned discussion of Mr. Maben's motion "that the Pharmaceutical Society resume the conduct of the Preliminary examination of their students," but it was defeated by six to seven for previous question.

THE ELECTION.

The scrutineers' report of the election of a new Executive was submitted, from which it appeared that the old members had been re-elected, Mr. Giles, Crown Street, Aberdeen, taking the place of Mr. C. F. Henry, Edinburgh, who did not seek re-election.

THE ANNUAL MEETING

of the members of the Society resident in Scotland was afterwards held, Mr. Boa presiding. The CHAIRMAN made a statement regarding the work of the Society in Scotland during the past year, and concluded by intimating that he wished to step aside and make room for another to take the chair. The scrutineers' report was read and adopted.

JACOB BELL SCHOLARSHIPS EXAMINATION.

THIS examination has been held this week, and we subjoin extracts from the papers set:

LATIN.—Translate into English: (a) *Semina Cacao leniter tosta, a testis liberata, contusa, in vase ferreo calefacto trita et sacco inclusa, ope preli, cujus laminæ in aquâ fervidâ calefacti sunt, exprime. Tum massa liquata loco calido per chartam bibulam filtretur, et in vasis vitreis obturatis servetur. Sit coloris è subflavo albi, sebo ovillo solidius, leni calore liquescens, saporis mitis.*

(b) *Omni olea ætherea servantur à luce remota, et ab aëris contactu sollicitè arceantur.*

(c) *Misce fiat haustus, per noctem, mane primo, et si opus sit, horâ tertiâ pomeridianâ, sumendus.*

There were also given a passage to parse and an English passage to translate into Latin, besides a passage from Virgil.

ENGLISH was confined to parsing, and an essay on one of the following subjects: (a) Modern methods of locomotion; (b) "Prevention is better than cure"; (c) competition.

ARITHMETIC.—Three sums were given—one in vulgar fractions, one in decimals, and a metric sum.

FRENCH or GERMAN.—A piece from each language to translate into English, and *vice versa*. No grammar.

CHEMISTRY.—(1) What tests would you apply to identify the following substances: Borax, barium carbonate, silver oxide? (2) How would you proceed to determine the purity of a sample of distilled water?

PHARMACY.—(1) Describe and explain the principles involved in the two official processes for preparing tinctures: (a) The maceration process, (b) the percolation process. (2) Give three emulsifying agents, and describe how they are used.

BOTANY.—(1) Describe any common indigenous plant with which you are familiar. (2) What are the chief functions of leaves?

Business Changes.

TEAQUELINE (LIMITED) have opened as "wholesale and retail herbal druggists" at Tudor Road, Cardiff.

MESSRS. LEWIS & BURROWS (LIMITED), chemists, have removed from 34 to 136 High Street, Clapham, S.W.

MR. D. LLEWELYN JONES, chemist and druggist, has opened a new business at 3 Ivy Buildings, Colwyn Bay.

DRS. MARSHALL AND CLYNE have opened a drug-store and dispensary at 79 Palmerston Road, Walthamstow, Essex.

"THE OLD DRUG-STORES," 100 Cowbridge Road, Cardiff, have been taken over by Mr. A. S. Price, chemist and druggist.

THE business lately carried on by Mr. F. W. Fox, chemist and druggist, at Redbourn, Herts, has been acquired by Mr. Whitaker.

THE PLYMOUTH DRUG COMPANY (LIMITED), Cornwall Street, Plymouth, will shortly open a branch at Mutley Plain, Plymouth.

MESSRS. TYPKE & KING, chemical-manufacturers, have removed from 47 Wilson Street, Finsbury Square, E.C., to 16 Mincing Lane, E.C.

MR. W. TAYLOR ROBSON, chemist and druggist, of Berwick-on-Tweed, has purchased the business of Mr. Thos. Weir at 59 Great Junction Street, Leith, N.B.

BOOTS CASH CHEMISTS (LIMITED) have taken premises at 7 and 9 Bond Street, Leeds, where they are making extensive alterations prior to opening a branch.

MR. ARTHUR HILL, chemist and druggist, has taken over the business of Mr. W. A. Cameron at 47 Midland Road, Bedford. (Corrected notice.)

MR. C. E. DAVIES, chemist and druggist, formerly of Carmarthen, has taken over the business at Kegworth, near Derby, lately belonging to Mr. C. J. Wathes, chemist and druggist.

The Students' Lament.

[THE annual botanical excursion to Caterham, organised by the School of Pharmacy Students' Association, has been cancelled owing to the school authorities not seeing their way clear to grant the extra holiday.]

From the "Minor" students mirth has had to flee,
And their Secretary's face is sad to see,
For the "botany" excursion,
As a Saturday's diversion,
Has been banned by professorial decree.

We were going down to Caterham in Kent (!),
Where in former years a happy time we've spent;
Through the woodland and the thicket,
Where the chirping of the cricket
Makes you long to be a gipsy in a tent.

For we've got some native Orders to inspect,
Labiata—seven others to detect;
And *Atropa Belladonna*,
Would receive the place of honour
In the bouquets we should gather to dissect.

'Neath the *Quercus* and the *Ulmus* we should feed
When a vacuum had signified the need;
Then the hedgerows we would plunder,
Though by prickles torn asunder—
In the thirst for higher knowledge we would bleed.

And we wished to find an isosporous fern,
And *Ranunculus bulbosus* in its turn.
Had a muddy pathway flung us
'Mong the nettle-beds that stung us,
We should rush to get some *Rumex* for the burn.

Then there's *Digitalis* growing wild or tame,
And the *Brassicas* of mustard-plaster fame;
And we'd pluck some *Helleborus*,
Lest examiners should floor us
By presenting some and asking us the name.

And there's aconite—the common dog-rose too—
And *Solanum Dulcamara*—tinted blue,
And there's *Ruta graveolens*,
We must master *volens volens*,
And a host of other synonyms to chew.

Then since all the local "Flora" we should see,
We would seek a homely hostel for some tea,
And the tables' load would lighten,
While each student's face would brighten
When he learnt the "S. A." funds would pay the fee.

Oh, it's well to see the country once a year,
From the dusty streets of London to be clear;
To be free of fœtid gases
And the squalor of the masses,
And the pretty songs of dicky birds to hear.—W. H. A.

THE average dividends paid by the German chemical-factories in 1902 was 10.39 per cent., against 10.43 per cent. in 1901.

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C.: June 18.

BUSINESS still remains very depressed in drugs and chemicals, with an absence of any important changes in value. Quinine in second-hands continues a declining market, and it is quite probable there will be a reduction in makers' prices after the sale of bark at Amsterdam to-day. Both German and French refined camphor has been advanced, but English refiners make no change. Cream of tartar is very firm, with an advance in B.P. quality. Saltpetre is 6*l.* dearer, and shellac has shown an active market, chiefly on speculative account. Sulphonal is lower. Cascara sagrada has been advanced on the spot, and senega is offering at easier prices. In essential oils, higher prices are wanted for cajuput oil, and the crop of geranium oil in the south of France has been jeopardised owing to the storms. The principal changes of the week are as follows:

Higher	Firmer	Easier	Lower
Camphor (ref. German and French)	Capsicums (Jap.)	Benzols	Quinine (sec. hands)
Cream of tartar	Cascara sagrada	Oil, castor	Sulphonal
Oil, linseed	Copper sulphate	Ginger	
Saltpetre	Oil, cajuput	Pepper, white	
Shellac	Oil, geranium		

Arrivals.

The following drugs, chemicals, &c, have arrived at the principal ports of the United Kingdom from June 4 to 17, inclusive:—Acid, salicylic (@ Rotterdam), 11; acid, tartaric (@ Rotterdam), 7, (@ Bari), 92; albumen (@ Paris), 3; aloes (@ Aden), 1 cs.; aniseed (@ Libau), 137; areca, 38; argol (@ Naples), 32; arrowroot (@ St. Vincent), 427 brls.; arsenic (@ Melbourne), 50 cs.; balsams, 141 pkgs.; benzoin 169, (@ Penang), 123; bromine (@ Hamburg), 20; canary-seed, 591; cardamoms (@ Ceylon), 385; caraway-seed, 25; castor oil (@ Antwerp), 10; chaulmoogra oil (@ Calcutta), 10 cs.; chloral hydrate (@ Rotterdam), 15; cinchona (@ Tuticorin), 154, (@ Mollendo), 20, (@ Bombay), 42, (@ Ceylon), 68, (@ Calicut), 360; citrate of lime (@ Palermo), 127, (@ Messina), 18; coca-leaves (@ Ceylon), 9; cod-liver oil (@ New York), 6 brls. 6 cs., (@ Bergeu), 28, (@ Aalesund), 50, (@ St. Johns'), 5; colocynth, 20; cream of tartar (@ Rotterdam), 20, (@ Bordeaux), 4; cumin-seed, 100; dragon's-blood, 22; drugs (@ New York), 37, (@ Yokohama), 10 cs., (@ Colon), 52, (@ Fiume), 41, (@ Palermo), 15 cs., (@ Libau), 5; essential oils (@ New York), 26, (@ Amsterdam), 6, (@ Messina), 39, (@ Palermo), 4; galls (Pers.), 1,709; gamboge (@ Singapore), 24 cs.; gentian, 21; gentian-powder (@ Tuticorin), 154, (@ Mollendo), 20, (@ Bombay), 42, brls., (@ Yokohama), 285, (@ Calicut), 142, (@ W.C. Africa), 218, (@ Bombay), 121 cs. 1,477 bgs.; guaiacum (@ New York), 26; gum arabic (@ Bombay), 40, (@ Alexandria), 34; gum, unenumerated (@ Aden), 92, (@ Trieste), 292; honey (@ Talcahuano), 402, (@ Eten), 50; (@ Kingston), 34 x $\frac{1}{2}$ brls.; lemongrass oil (@ Havre), 14; lime-juice, 46; musk (@ Ceylon), 1; nux vomica, 1,035; olibanum (@ Bombay), 198; olive oil (@ Bari), 28 cs. 51 brls.; opium (@ Constantinople), 22; peppermint oil (@ Montreal), 2; pot. cyanide (@ Rotterdam), 5, (@ Paris), 50; pot. oxalate (@ Amsterdam), 15; pot. permang. (@ Hamburg), 85; pot. pruss., 6; quicksilver (@ Seville), 5,000 flks.; rhathany, 12 bls.; rhubarb, 27; saccharin (@ Antwerp), 2 cs.; saffron (@ Valencia), 1; sal ammoniac (@ Amsterdam), 8; sandalwood (@ Mangalore), 323 bdis. and 185 in tr.; sarsaparilla (@ New York), 50; scammony-

root (@ Alexandretta), 69; senna (@ Suez), 73, (@ Tuticorin), 11; shellac (@ Calcutta), 1,440, button ditto 39; sticklac (@ Havre), 16; soda acetate (@ Rouen), 9; soda bichrom. (@ Rotterdam), 13; soda chlorate (@ Gothenburg), 100; soda crystals (@ Ghent), 1,415; soy, 150; sucramine (@ Antwerp), 1; sugar of lead (@ Stettin), 67; sulphur (@ Catania), 75 cks.; tamarinds (@ Barbados), 31, (@ Kingston), 27 x $\frac{1}{2}$ brls.; tonka-beans (@ Trinidad), 1; tragacanth, 162; turmeric (@ Bombay), 80; vanilla (@ Ceylon), 3 bxs.; wax, bees' (@ Bombay), 6, (@ Sydney), 4, (@ Karachi), 13, (@ Kingston), 3, (@ Valparaiso), 20; wax, ceresin (@ Hamburg), 20, (@ Cologne), 43; wood oil (@ Shanghai), 30; zinc oxide (@ New York), 300.

Heavy Chemicals.

There is little of special importance to be reported respecting the general condition of the heavy-chemical market, the prevailing features being unchanged from those given in recent reports, and a moderately steady business at unchanged rates is being transacted.

ALKALI PRODUCE—Caustic soda keeps on the quiet side, whilst demand for ammonia alkali and soda crystals is well maintained. Bleaching-powder is being largely booked for delivery over next year, and that at low prices. Chlorates and prussiates are both firmer in tone.

SULPHATE OF AMMONIA, although still somewhat quiet, is in heavier request, with prices as follows: Beekton, June delivery, 12*l.* 17*s.* 6*d.*; Beekton terms, 12*l.* 15*s.*; London, 12*l.* 15*s.* to 12*l.* 17*s.* 6*d.*; Leith, 12*l.* 1*l.* 3*d.* to 12*l.* 17*s.* 6*d.*; and Hull, 12*l.* 12*s.* 6*d.* to 12*l.* 13*s.* 9*d.*

BENZOLS are very quiet, and ruling prices are lower: 90 per cent., 8*½d.* per gal.; 50 per cent., 7*d.* per gal. Aniline oil and salt in moderate demand, at unchanged rates of 5*½d.* and 4*½d.* per lb. respectively.

PEARL HARDENING.—In average request, at 60*s.* to 65*s.* per ton, in usual casks, free on rails or free on board.

RECOVERED SULPHUR, with continued good demand and scarcity, is very firm, at 5*l.* 5*s.* to 5*l.* 10*s.* per ton, in bags, free on rails.

MAGNESIUM SALTS are in steady consumptive request at unaltered values. Chloride, 62*s.* 6*d.* to 67*s.* 6*d.* per ton; magnesium sulphate (Epsoms), 62*s.* 6*d.* to 65*s.* per ton; carbonate of magnesia, 37*s.* 6*d.* to 40*s.* per cwt.

Liverpool Drug-market.

Liverpool, June 17.

ACACIA SORTS.—Only in retail demand, but the recent advance has been fully maintained, several parcels changing hands at from 30*s.* to 37*s.* 6*d.* per cwt.

CASTOR OIL.—The market remains still very flat and only in retail demand, at from 2*½d.* to 2*¾d.* per lb. for good seconds Calcutta, first-pressure French also selling at the same price.

QUILLAIA-BARK.—There have been large transactions at the advance, and nothing is now procurable on the spot under 25*l.* to 26*l.* per ton, and some large transactions have taken place on c.i.f. terms.

GINGER (AFRICAN) has further advanced, 10 tons being sold at 29*s.* per cwt. to arrive.

COCHIN GINGER.—In demand at from 37*s.* to 40*s.* per cwt., and keen competition for what offers to arrive.

CREAM OF TARTAR continues to advance, and from 82*s.* to 27*s.* per cwt., f.o.b., is asked, according to quality.

BEESWAX (CHILIAN).—Further considerable sales have been made at from 7*l.* 5*s.* to 7*l.* 15*s.* per cwt., according to quality.

WAX (CARNAUBA).—Sales of yellow have been made at 80*s.* per cwt., and grey 65*s.* per cwt.

TONQUIN-BEANS.—Several parcels offered at auction and subsequently changed hands on private terms.

IRISH MOSS.—There is still an absence of ordinary quality. Medium is selling at 12*s.* 6*d.* to 15*s.* per cwt.

COD-LIVER OIL.—There are several inquiries for Newfoundland, but merchants will not yet fix a price for the new.

German Drug-market.

Hamburg, June 16.

Business is very quiet on our drug-market owing to the Parliamentary elections.

BALSAM PERU is quiet and lower, at 9*m.* per kilo.

CAMPHOR (REFINED).—Refiners have raised their prices to 435*m.* per 100 kilos. and second-hands 430*m.*

COCAINE is very strong and in good demand; raw material is very high, and importers ask 500*m.* for crude. Second-hands quote 585*m.* per kilo. for hydrochloride.

CONDURANGO is firmer, at 85*m.* to 90*m.* per 100 kilos.

ERGOT is lower, at 225*m.* per 100 kilos.

FENUGREEK is quiet and lower, at 13*½m.* per 100 kilos.

IPECACUANHA.—Rio is quoted 12*½m.* to 13*m.* per kilo. and Cartagena 10*m.*

MENTHOL is very firm, at 55*m.* per kilo. on the spot.

QUININE is unchanged, at 35*m.* per kilo.

QUILLAIA is firmer, at 44½m. per 100 kilos.
JAPANESE WAX is dull of sale, at 122m. per 100 kilos.
OILS (FIXED).—Castor is quiet and neglected. Cod-liver is unchanged. Cotton is advancing. Linseed is very dull, and Chinese wood-oil is firmer.

OILS (ESSENTIAL).—Japanese peppermint is quiet, at 18½m. per kilo. HGH. is a little easier, at 13½m. to 13m. per lb.
CEVADILLA-SEED is firm, 100m. per 100 kilos, being asked.
ELEMI.—Manila is quoted at 175m. per 100 kilos.
MYRRH is scarce at 157½m. to 160m. per 100 kilos.
SENEGA is very firm, spot offering at 1,000m. and forward delivery 900m. per 100 kilos.

SUGAR OF MILK is firm at from 95m. to 100m. per 100 kilos.
WAX (CARNAUBA) is firm and dearer, prices ranging from 145m. to 200m. per 100 kilos., according to quality.

American Drug-market.

New York, June 9.

Business is seasonably dull, but there is no indication of weakness, and the total volume is satisfactory for this season of the year.

BALSAM COPAIBA is in good jobbing demand. Recent arrivals have all been sold, and the market is steady at 37c. for prime Central American. Some African balsam is coming in to be used for "manufacturing" purposes.

BEESEX is in light supply, but poor demand keeps the price down. Ordinary yellow is obtainable at 31c. to 33c. per lb.

BROMIDES are still unsettled with two makers refusing to advance prices. As a large amount is still due to dealers on old contracts, an early settlement is not probable.

CASCARA SAGRADA is in good consumption, and quotations rule fair at 13c. to 15c. The outlook for new crop is by no means favourable, very little is being peeled as yet, and the output is likely to be small.

ERGOT has declined to 27c. for Russian. Spanish is still held at 28c., but demand is very small.

MANDRAKE is scarce and firm at 4¼c. The quality of the root is still very poor, and the resin-content seems to show steady depreciation.

MENTHOL has sold at \$7.25, and more is to be had at this figure, though most dealers ask \$7.50.

OPIMUM.—Easier; primary markets and lack of demand have depressed the price to \$3.17½.

PEPPERMINT OIL is easy, and sales are small; \$2.85 will still buy.

QUININE.—Java sold at 21c. Second-hands offer German in small lots at 23c.

SARSAPARILLA.—Mexican is offered sparingly at 7¼c.
SASSAFRAS-BARK is in better supply, and offering at 6½c.

SENEGA is firm, and has sold for export up to \$1.05. Some new crop has been delivered at primary sources at 60c., so that the outlook is for high prices. On the spot, however, the root is being offered at lower prices to arrive.

ACID, CITRIC, is quiet at 1s. 1¼d. per lb.

ACID, TARTARIC, is firm, and in fair demand at 1s. 1¼d. for foreign, on the spot, and 1s. 1½d. for forward delivery. English is 1s. 1½d. per lb.

ALMONDS.—A Messina report, dated May 31, states that after the recent scare prices have not dropped to their former level. The hope of a large crop at Bari appears to have vanished, and in Sicily the prospects are for an average crop. P. & G. sweet are quoted 66s., and bitter 71s., current Avola 69s., and choice ditto 79s. per cwt. of 50¼ kilos, f.o.b., for prompt shipment.

AMERICAN DRUGS.—The following are a few current net quotations: *Angostura bark*, 170s., c.i.f.; *Sassafras-bark*, 4d. per lb., c.i.f.; *Wahoo-of-root*, 10½d., c.i.f.; pressed *Lobelia*, 6d.; loose ditto, 4½d., spot; *Damiana-leaves*, 6d., spot; *Golden seal*, 2s. 4d., spot; *Culeers-root*, 5d. to 6d., c.i.f.; *Podophyllum-root*, 24s., c.i.f.; *Blood-root*, 3½d. per lb., c.i.f.

BALSAM CANADA.—The demand for labour and the prevalence of forest fires in Canada point to a continuance of high prices for some time to come. Casks are quoted 1s. 10d. per lb., c.i.f., and cases 2s.

BENZONIN.—Business since the auctions includes fair Sumatra seconds at 6l. 2s. 6d. per cwt., medium at 5l. 15s., and ordinary at 4l. 15s.

CAMPHOR.—German and French refiners have advanced their prices ½d. per lb., and now quote 1s. 11½d. for ton lots, 2s. for half tons, and 2s. 0½d. for 5-cwt. and smaller wholesale quantities of bells, without engagement. English

refiners' prices are unchanged. Crude camphor is very firm, and almost unobtainable for forward delivery. There is little Japanese available on the spot, and holders ask prohibitive rates.

CASCARA SAGRADA.—The price has been advanced to 50s. per cwt., spot, for one-year-old bark, but for three-year-old 55s. is asked. The crop is expected to be both late and short. A private advice from America states there is great difficulty in getting offers of new crop, as the "bears" had a bad time last year, and are afraid of being caught "short" again.

CINCHONA.—The exports from Java during the first half of June amounted to 693,000 Amst. lbs., against 663,000 Amst. lbs. last year, and 500,000 Amst. lbs. in 1901. The exports from British India during the twelve months ending March amounted to:

	1902-03	1901-02	1900-01
Lbs. ...	1,579,498	1,917,259	2,753,853

COCA-LEAVES.—Good green Truxillo leaves are obtainable at 10½d. per lb.

COCAINE.—Makers report a very firm market for hydrochloride, having done business on the basis of 17s. per oz.

COCHINEAL.—Good to fine bold silvers or blacks are quoted 10d. to 1s. 1d. per lb.

COPPER SULPHATE.—Only 31 tons were shipped from Huelva, Spain, during 1902, against 204 tons in 1901.

CREAM OF TARTAR is much firmer, and a very good business has been done. B.P. quality powder (98 per cent.) is now quoted 90s., an advance of at least 1s. on last week's price, and 95 per cent. is offered at 88s. per cwt.

DRAGON'S BLOOD.—The s.s. *Deucalion* has arrived with 22 cases from Singapore.

GALLS.—A shipment of about 2,000 bags Persian has arrived this week, a fair proportion of which has been sold to arrive. Blue is quiet, but white has been in more demand at about 48s. 6d. per cwt.

GAMBIER.—*Cubes* continue quiet, with small spot sales at 42s., but for June-August shipment 36s. 3d., c.i.f., is quoted.

HENBANE-LEAVES.—New Hungarian is quoted 34s. to 36s., c.i.f.

IPCACUANHA.—Retail sales of Rio have been made at 5s. 9d. per lb.

MENTHOL is quiet at from 24s. to 25s. spot, according to brand. For October-November shipment, business has been done at 18s., c.i.f.—a "bear" sale.

OIL, ANISEED, STAR.—Inactive, at 4s. per lb., spot.

OIL, CAJUPUT, is rising in value, holders now asking 3s. per bottle for good green Singapore.

OIL, CASSIA, is quiet, at from 3s. to 3s. 3d. per lb. for 80 to 85 per cent. cinnamic aldehyde.

OIL, CASTOR, is rather easier since we last quoted. Hull make is offered at 20l. per ton for first pressing, and 18l. for second pressing, ex wharf London, for prompt and for delivery up to the end of the year. Belgian, for July to December delivery, is quoted 20l. and 17l. 10s. for firsts and seconds, respectively.

OIL, CITRONELLA, is quiet, at from 9½d. to 10½d. per lb. on the spot for Ceylon.

OIL, COD-LIVER.—A feature of this article is the fact that small sales of new Norwegian medicinal oil have been made at 500s. net per barrel, and for old oil, which, however, is considered much superior in quality to the new, a few barrels have been sold at 495s. Although there are offers from Bergen at 20s. and 30s. less than the above figure the quality is quite secondary. "Liver oil," which is apparently obtained from the livers of skate and other fish, is being freely offered on this market for adulterating with pure cod-liver oil, and strange to say it has been found by an eminent chemist to pass the test laid down in the British Pharmacopœia. Our Bergen correspondent writes on June 13 that practically no progress has been made in Finmarken during the week ending the above date, and that the prospects for further fishing remain poor. The market for finest non-congealing oil remains very quiet and unaltered,

with sellers at 480s. per barrel, f.o.b. The exports from Bergen to date amount to 1,201 barrels, against 4,132 barrels at the corresponding period of last year. A report from Bergen from another source, dated June 10, offers new steam-refined non-freezing quality at from 450s. to 460s. per barrel, free on rails at Hull without engagement. The official statistics give the total quantity of cod-liver oil production this year up to date at only 2,709 hectolitres, and for comparison we give the official statistics for previous years:

	Hect.		Hect.
1902 ...	21,881	1896 ...	23,303
1901 ...	35,369	1893 ...	35,581
1900 ...	33,591	1890 ...	29,807
1899 ...	34,087	1888 ...	22,427
1897 ...	34,392		

The average for the fifteen years 1902 to 1888 is 27,748 hectolitres.

OIL, GERANIUM.—It is said that storms have done considerable damage to the crop in the South of France, and, if this should prove to be the case, much higher prices may be expected for the new oil, due in September.

OIL, OLIVE.—A report from Messina dated May 31 states that the blossoming of the olive-trees is in full swing in Sicily and has begun in Calabria. The favourable reports have had a depressing influence on the market, the more so as prices in Spain, which had advanced, have since fallen again. Stocks are very small, however, and insufficient to meet any demand for export. Gallipoli oil is quoted 34l. 5s., choice ditto, 35l.; and burning Russia, 36l. 5s.; yellow Messina, 33l. 15s., and green Messina, 33l. per ton of 1,045 kilos, f.o.b.

OIL, PEPPERMINT, is quiet, holders asking 12s. 6d. to 13s. for American HGH, and for *Todd's* oil business is said to have been done at 13s. 6d., spot. H. G. Hotchkiss writes that "about one-half of the plantings will have to be ploughed up, owing to the drought."

OIL, WINTERGREEN, is quoted 6s. 9d. per lb., spot.

OIL, WOOD, is quoted 24s. per cwt., c.i.f. London, and business is reported at this price.

OPIUM.—The London market is very quiet, but firm, with retail sales of secondary soft shipping at 9s. per lb.

SMYRNA, June 5.—During the past week rains have been pretty general in all the opium districts, and although the situation cannot be saved as regards a large crop, still it has prevented an utter failure, and if Salonica gives, as it is now stated, a yield of 800 to 1,000 cases, we may after all reckon on a crop of 4,000 cases all told. With such a quantity on hand, coupled with the old stocks, there should be sufficient to go on with for twelve months, at prices ranging between 8s. to 9s. as to quality, condition, and consumers' demand. As no business has been done this week, quotations remain unaltered, but the position, owing to better crop prospects, is very weak, and needy holders may be induced to sell at a few pence lower rates. The arrivals in Smyrna to date amount to 5,261 cases, against 3,376 cases at the same date last year. These figures include 16 cases of the new crop, against 25 cases at the corresponding period of last year.

CONSTANTINOPLE, June 12.—We have no change to report since our last, and the only sales during the past week are 7 cases "Druggist's" at 8s. 4d. to 8s. 7d. per lb., f.o.b.

PUMICE-STONE.—In consequence of a tax having been placed on the exports of pumice from Italy, prices are rather higher.

QUICKSILVER.—The exports from Seville during 1902 amounted to 1,132 tons, against 830 tons in 1901 and 1,025 tons in 1900.

QUININE.—There has been little disposition to do business this week in view of the Amsterdam sale of bark to-day. Sales representing altogether about 30,000 oz. have, however, been made at from 10½d. to 10¾d. per oz. for good German sulphate in bulk, being lower. December delivery has also been sold at 10¾d.

During the three months ending March the exports of quinine, quinine preparations, &c., from Germany have been:

	1903	1902	1901
Kilos.	41,600	33,800	49,800

RHUBARB.—An arrival of 27 cases has taken place from Shanghai, also 32 cases in transit.

ROSE PETALS.—French of the new crop (1903) open at rather high figures, one agent offering for immediate delivery at 2s. 6d. per lb. net, but in other directions there are offers at several pence less.

SALTPETRE is 6l. per cwt. dearer. British refined is offered at 20s. in barrels, 21s. in kegs; and German is 20s. in barrels, and 20s. 9d. in kegs.

SARSAPARILLA.—Honduras is quoted 1s. 4d. to 1s. 5d. per lb. spot, and Mexican 4d., c.i.f. terms.

SENEGA.—The sale "without reserve" last week appears to have unsettled the market, and, in view of the firm position and spot scarcity, it seemed somewhat unnecessary. There is no demand for the moment, and it would be possible to buy at 3s. 8d. per lb. net. There are offers of the new crop for shipment at 3s. 2½d., which, of course, is speculative and in "bear" interests.

SHELLAC.—The demand for spot parcels has been slow, at unchanged prices, fair TN orange selling on a basis of 128s. per cwt. Fine and good orange marks remain exceptionally scarce, values ranging from 145s. to 160s. per cwt. AC garnet is firmly held at from 112s. to 113s., spot, and small sales are reported. Button lac has been in fair demand at unchanged rates. Both for arrival and delivery a good business has been done during the week at higher prices. At auction on Tuesday a small supply offered, comprising 107 cases garnet, which were bought in at 110s. for blocky GAL and 111s. for G in diamond; 25 cases second orange catalogued had been sold privately, and 11 odd cases button sold at from 105s. to 140s. per cwt.

SLIPPERY-ELM BARK is very scarce, one holder asking the high price of 90s. per cwt.

SPERMACELE.—American is quoted 1s. per lb. spot.

SPICES.—There has been more activity in the market for Zanzibar *Cloves* for delivery at rather better prices, sales up to Wednesday comprising June-August at from 4l. to 4½d., August-October 4½d., and October-December 4½d. per lb. On the spot small sales have been made at 4d. In auction fair to good Penang were bought in at from 9½d. to 10d. *Ginger*, in auction, sold at steady prices for Jamaica, good bright selling at 55s. 6d., fair washed 48s. to 51s., medium dullish 44s. 6d. to 46s. 6d., common to good common dullish 41s. 6d. to 43s. 6d., and Rhatoon, 40s. per cwt. Cochin was rather easier on sales "without reserve," fair washed rough selling at 33s. 6d., and cuttings 30s. 6d., about 700 packages being sold. Good bold cut Cochin was bought in at 72s., and good medium cut 65s. Lined Japanese was bought in at 28s. to 29s. *Pepper* quiet, barely fair Singapore being bought in at 6½d., and good Tellicherry at 6½d. Fine heavy Mangalore sold at 1s. to 1s. 0½d., and grey Tellicherry at 6d. *White Pepper* was easier, fair selling at 9½d.; 15 cases Tellicherry offered and sold at from 1s. 3½d. to 1s. 5½d. for fine to superior picked, fine coriander kind 1s. 1d. to 1s. 1½d., small 10½d., and siftings 9½d. to 10d. Japanese *Capsicums* were rather dearer, fair picked selling at 22s. *Mace* sold steadily at from 2s. to 2s. 1d. for fair red to pale West Indian, and 1s. 10d. to 1s. 11d. for ordinary red. *Nutmegs*, *Cassia lignea*, *Pimento*, *Arrowroot*, and *Coriander-seed* were all quiet and supplies offered were mostly bought in.

SPIRIT, METHYLATED.—The English distillers met on Tuesday, and decided to advance the price of raw spirit. In consequence of this the price of methylated spirit will probably be raised 2d. per gal.

SULPHONAL.—Bayer's have reduced their price in 1-lb. bottles to 4s. 6d. per lb., a drop of 9d.

THYMOL.—Manufacturers in Germany are keen for orders in spite of the higher prices asked for ajowan seed, the consequence being that the market keeps easy at from 5s. 9d. to 6s. per lb., according to quantity.

TURMERIC.—Madras is quiet at 13s. 6d. to 14s. 6d. per cwt. for Rajapore finger, and 8s. to 10s. for ordinary Malabar description. Sellers of Bengal quote 8s. 9d., c.i.f. In the drysaltery auctions 132 bags fair bright Madras finger were bought in at 14s., and fair Coconada at 12s. per cwt.

VANILLA.—The exports from Réunion during 1902 amounted to 111 tons against 50 tons in 1901 and 95 tons in 1900. The British Consul at Réunion remarks that the

greater part of the trade has been captured by the Germans, who export through Marseilles.

VANILLIN is offered from Hamburg at 16s. per lb.

WAX (BEES').—American yellow (WHB brand) is quoted at 8½ 5s. per cwt. net, and white ditto 9½ 5s. net, in lots of five cases.

New Peppermint-oil Adulterant.

An analysis by Mr. E. J. Parry, B.Sc., of a Wayne County peppermint oil has created considerable stir in market circles this week. We understand that the buyer has refused to arbitrate on the matter, and that it is in his solicitor's hands. The analysis is as follows: "I have analysed the above described sample, and, from the results obtained, I am of opinion that it is grossly adulterated. The adulterant is a heavy oil, having all the characters of sesquiterpene. I have therefore examined the more commonly occurring bodies of this nature, and from this examination I am of opinion that this oil has been mixed with the essential oil distilled from African copaiba, and possibly another body which I have not been able to identify. I am of opinion that at least 35 per cent. of adulterant has been used. Sp. gr., 0.909; optical rotation, — 3° 10'."

American Bromides.

The disagreement between the American makers of bromides remains unsettled, according to the *New York Commercial* of June 2. The faction which raised the price continues to quote the advanced rates and reports that it is more difficult to secure goods than orders. The other faction which refused to advance continues to quote the low rates, but fills orders for regular customers only. The Dow Chemical Company, of Midland, who say they are the largest manufacturers of bromides in the United States, write to the *Commercial* stating they are buying all the bromine they can find in the hands of other makers and they have already orders in hand that will take a number of months to fill. A representative of Messrs. Merck & Co., one of the firms which advanced the price, said there was a considerable shortage of bromides due to increased consumption of bromine throughout the country.

Senega.

The Stallman & Fulton Company, of New York and London, have issued a circular giving the following extract from a letter received from one of their correspondents in regard to the probable future course of the senega market: "The new crop will probably begin to arrive soon, and, while it is too early to give any information of value regarding it, we would say that the prospects are for constantly reduced quantities of this article, and that two factors must be considered this season, which will materially reduce digging. Firstly, a great deal of the territory which formerly supplied this article has been opened up to agriculture. Secondly, the rains have largely prevented digging. On the other hand, the very high price will no doubt stimulate digging in the remainder of the senega district. There is but one lot of senega in this market now, which is held at 90c. without offer = 3s. 9d. net, and costing over 4s. net, laid down in London."

The Turpentine-crop.

Mr. John R. Young, President of the National Tank and Export Company, of Savannah, speaking to a *New York Commercial* reporter regarding the turpentine-crop, said, "All through April and up to the present the weather has been too unfavourable to gather the stuff, so that this crop will in all probability be less than that last year. Had it not been for this drawback caused by bad weather I believe we would have produced as large a crop as that of last year. With decreased production ahead and the world clamouring for turpentine from all quarters, it is not surprising that the price is advancing. Every year witnesses an increase in the demand for turpentine. Much has been said about wood-turpentine as a substitute for the tree-product, but I do not believe that product will fill the bill. The genuine turpentine comes from the pine-tree direct. The wood-turpentine comes from the castaway parts of the pine, or from wood other than that from which the crude gum is extracted."

A Corner in Thorium.

Within the past twelve months the price of thorium nitrate, which forms the basis of the incandescent gas-mantle as now manufactured, has gone up considerably. Twelve months ago the price was 28m. per kilo.; now it is 45m. per kilo., or almost double. Most of the thorium nitrate that is used in incandescent-mantle manufacture is obtained from deposits of monazite sand in Brazil. From that country it is shipped to Hamburg, and there, it is alleged, it is "cornered" in the interests of the larger firms of manufacturers in Germany. The incandescent mantle has come down very much in price within the past two or three years, and the *Gas World* reports that steps are being taken with a view to thwart the ring that has been formed. The Board of

Trade is, through its Intelligence Department, giving its assistance in the matter.

Bleaching-powder in U.S.A.

The *New York Engineering and Mining Journal* states that the bleaching-powder and chlorine industry has been very demoralised during the current year, and manufacturers' books will show little or no profit at the end of December. Already several important European works are economising, particularly as regards fuel for generating power. On the other hand, electrolytic bleach-makers are increasing their business, as they can cut prices to a level where old-process plants hesitate to make long-time contracts. Nearly 75 per cent. of the imports are from Great Britain, which, as noted below, show an increase as compared with last year. The imports into the United States from all countries in April amounted to 13,093,518 lbs., which was the largest quantity reported this year, and exceeds that for April, 1902. In the four months ending April 30 the imports have been as follows, in lbs.:

From	1903	1902	—
Great Britain	32,302,144	28,737,072	+ 3,564,072
Germany, Belgium, France	11,068,351	15,401,344	— 4,333,283
Total imports	43,370,495	44,138,416	— 763,221

Cablegrams.

BERGEN, June 17, 8.7 P.M.:—The total catch of cod for the whole of Norway since the opening of the season amounts to 45,540,000, against 41,435,000 at the corresponding date of last year, and the yield of steam-refined cod-liver oil is 2,297 barrels, against 18,616 barrels at the same period of 1902. The fishing at Finmarken remains poor, and the market is unaltered at 480s. per barrel, f.o.b., Bergen, for best non-congealing medicinal oil.

HAMBURG, June 18:—Carnauba wax, refined camphor, and cocain, are firm. Menthol is scarce.

NEW YORK, June 18:—Business here is tame. Opium is weak, at \$3.15 per lb. by single cases. Quinine is also weak at 23s. per oz. Ergot is firmer at 28s. per lb., and Japanese wax is easier at 15s. Peppermint oil has also an easier tone, at \$2.80 per lb. for bulk. Senega is offered at 95c. per lb., being weaker.

AMSTERDAM, June 18:—Owing to the large quantity of cinchona to be disposed of at the Amsterdam auctions today our usual cablegram had not arrived at the time of closing for press. We understand the auction opened at 6c., a decline of 20 per cent. on the previous auction.

Spirit Questions.

There was an instructive discussion on several industrial questions related to spirit at the Congress of Applied Chemistry. Mr. A. Bannow, of Berlin, first gave his views in regard to denaturising, giving objections to the substances now in use for this purpose, and expressing preference for acetone or acetonitole. Another paper was on the manufacture of spirit from wood sawdust. This was by Mr. Simonson, of Christiania, who stated that the process is based on the formation of sugar from the wood by means of dilute sulphuric acid, and subsequent fermentation and distillation. From 100 kilos. of wood 6 to 7 litres of pure spirit is obtained, with methyl alcohol and acetic acid as by-products. The cost of the pure spirit is 15s. 6d. per 100 kilos., compared with 25s. for potato-spirit. There was a good discussion on Mr. Simonson's paper, but most of the speakers were sceptical about his results.

CARBONATE OF MAGNESIA figures as an export for the first time from the port of Gijon, Spain, to the extent of 250 tons, shipped to the United Kingdom.

PETROLEUM DYES.—A chemical factory at Kineshma, on the Volga, manufactures aniline dyes from petroleum-distillate instead of coal-tar. The colours are used in wool-dyeing.

Citronella Oil.

By ERNEST J. PARRY and CHARLES T. BENNETT.

WE recently published two papers in this journal (1903, 88 and 408) dealing with the question of citronella-oil adulteration, and proposed definite standards for the pure oil, showing at the same time that Schimmel's test, which had served a very useful purpose, was not sufficient to detect sophistication under all circumstances. We are glad to notice that Messrs. Schimmel & Co. (*Semi-annual Report*, April 1903, 21-22) have repeated our experiments and, after quoting our proposed new standards, state, "We can only express our complete agreement with this proposal." It is satisfactory that Messrs. Schimmel & Co. and ourselves are in complete agreement in this matter, and no doubt, if these standards are regularly adopted and enforced, the wave of adulteration will be kept back, and citronella oil will regularly be imported pure.

It is necessary to bear in mind that an oil may often be sophisticated to satisfy a given test, so that the other characters of the oil must always be taken into account. Not only are the sp. gr. and the optical rotation of importance, but the actual content of geraniol and citronellal must be regarded as deciding the actual value of the oil. Umney has strongly advocated the determination of the acetylisable constituents, and—given oils of one class—the value must be regarded as proportional to this figure. Few oils contain less than 60 per cent., and 55 per cent. is certainly the lowest figure which could be accepted. If the oil were sold on a valuation of its geraniol and citronellal content it would be on a scientific basis, and oils would be graded as they are in the case of cassia. This, of course, is a matter the *pros* and *cons* of which the London market would have to weigh, but at all events the following figures will ensure a pure oil (being based on normal distillates) and entirely prevent the pernicious adulteration now so commonly obtaining:

*Sp. gr. at 15.5° C.	0.900 to 0.915.
*Optical rotation (100 mm.)	0° to - 15°.
Sp. gr. of first 10 per cent. (distilled at 20-40 mm.)	Above 0.858.
Refractive-index of ditto	Above 1.4570.
Solubility in 80-per-cent. alcohol	To pass Schimmel's test.
Geraniol and citronellal (calculated as total geraniol)	Above 58 per cent.

The limits marked by asterisks apply to most normal Ceylon oils. To many—indeed, to most—East Indian distillates they do not apply.

South African Tariff.

THE tariff agreed upon by the representatives of the South African Colonies at the Bloemfontein Conference in March last was issued last week as a Parliamentary paper. Previous to the war there were three distinct tariffs in operation in South Africa—viz., one applicable to imports into Cape Colony, Natal, the Orange Free State, Basutoland, and Bechuanaland; the second was the Transvaal tariff; and the third applied to Rhodesia. The present Convention renders these obsolete, and the following is the new tariff proposed to be levied on imports within the South African Customs Union so far as our readers are interested. It is well to state that confirmation of this tariff has yet to be obtained from the various Legislatures:

CLASS I.—SPECIAL RATES.

	£	s.	d.
Acetic acid, per gal.	0	3	0
Coffee, raw, per lb.	0	0	0 $\frac{3}{4}$
Coffee, roasted, ground, or mixed, per lb.	0	0	2
Cocoa and chocolate unsweetened, per lb.	0	0	1

	£	s.	d.
Cocoa and milk, chocolate and milk, and coffee and milk, per lb.	0	0	1
Condensed, desiccated, or preserved milk or cream, per lb.	0	0	0 $\frac{1}{2}$
Confectionery, including sweetened cocoa or chocolate, honey, jams, jellies, preserves, sweetmeats, candied or preserved ginger or chow-chow; and all other kinds compounded, made or preserved with sugar, but not including purely medicinal preparations properly classed as apothecaryware, per lb.	0	0	2
Soap, not including toilet-soaps and soap-powders and extracts, per lb.	0	0	0 $\frac{1}{2}$
Spices and turmeric, per lb.	0	0	2
Spirits—			
(a) Perfumed, per Imperial gal.	1	0	0
(b) Liqueurs and cordials exceeding 3 per cent. of proof spirit, per Imperial gal.	0	15	0
(c) Other sorts, exceeding 3 per cent., but not exceeding proof	0	15	0
(And in addition 10 per cent. <i>ad valorem</i> on all the above classes of spirits.)			
Sugar—			
(a) Not refined, golden syrup, molasses, saccharum, and treacle, per 100 lbs.	0	3	6
(b) Refined, per 100 lbs.	0	5	0
Tea, per lb.	0	0	4
Vinegar in bottles or other vessels of not more than one Imp. quart, per Imp. gal.	0	1	0
Vinegar, in larger vessels or in bulk, per Imp. gal.	0	0	6
Concentrated extract or essence of vinegar of greater strength than above, per Imp. gal.	0	3	0

CLASS II.

Mixed *ad valorem* Rates.

Extracts and essences of all kinds for flavouring or perfumery, including saccharin, per 100l.	25	0	0
Medicines, patent or proprietary, per 100l.	25	0	0
Oils, essential or perfumed, per 100l.	25	0	0
Perfumery, cosmetics, dyes, powders, and soap, and other preparations for toilet use, and soap powders and extracts, per 100l.	25	0	0

CLASS III.

Ad valorem 2 $\frac{1}{2}$ per cent.

Acids: Nitric and sulphuric.	
Assay apparatus.	
Bottles and jars of common glass or earthenware, and bottles ordinarily used for aerated waters—empty.	
Corks and bungs, and corkwood unmanufactured.	
Cyanide of potassium.	

CLASS IV.

Free.

Borax, bromine, litharge, manganese dioxide, and quicksilver.	
Bottles and jars of common glass or earthenware imported full of any article liable to a rated duty.	
Boxes, empty, cardboard and wooden.	
Collodion cotton, glycerin, and nitrates for manufacturing purposes.	
Dye-nuts, gambier, myrobalans, sumach, valonia, and other dye-stuffs for leather.	
Glue.	
Guano and other substances, animal, mineral, or vegetable, artificial or natural, suitable for use as fertilisers or manure.	
Potash and soda carbonate, bicarbonate, caustic, crystals, and silicate.	
Resin and carbonate of ammonia.	
Sheep-dip, sheep-dipping powders, materials suitable only for dip, and dipping-tanks.	
Sprayers and sprinklers and other apparatus for destroying pests or diseases in stock, plants, or trees.	
Sulphur and other substances for destroying pests or diseases in stock, plants, or trees, and disinfectants.	
Vaccine virus, toxin, and serum.	
Wax—viz., paraffin and stearine and stearine grease ordinarily used in the manufacture of candles.	

CLASS V.

General *ad valorem* Rate, 10 per cent.

All goods, wares, or merchandise not elsewhere charged with duty, and not enumerated in the free list, and not prohibited to be imported into the Union, shall be charged with a duty of 10 per cent. *ad valorem*.

"PRACTICAL URINE-ANALYSIS."—"Very lucid, and an extremely useful little book."—M.D. (Durh.), M.B., B.S. (Lond.). Price 2s. 6d., by post, 2s. 9d., office of C. & D.

Starch in Capsicums.

By J. C. STEAD, Ph.C., F.C.S.

A SEARCH among the literature appertaining to capsicums fails to bring to light any mention of starch as a constituent of these fruits, with the exception that Braconnet, in an analysis (1817), gives a percentage of "brownish starchy matter." One authority, however, referring to the



LONG BOMBAY CAPSICUMS.

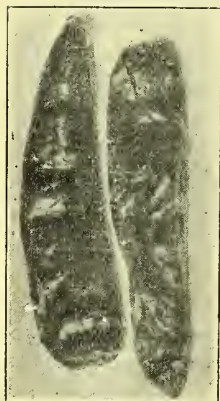


MADRAS CAPSICUMS.

seeds, states that they do not contain starch, and this statement appears to be generally accepted as correct.

Recently a sample of cayenne pepper, alleged to contain a "trace of ginger," was submitted to the writer. In it, under the microscope, frequent starch granules similar to those of ginger were easily distinguished, but it showed practically no oily globules as compared with a pepper recently ground. On comparing its alcohol-extractive with those from (1) similar cayenne peppers to which 1 and 2 per cent. of ginger had been added, (2) a pepper specially ground in the laboratory, and (3) a special bulk grinding of some time previous, no indication of the presence of ginger could be detected, whilst in the extract from the pepper containing 1 per cent. of ginger the addition was perceptible.

The exhausted peppers were then examined microscopically, using iodine for staining. Starch granules were found in all



NATAL CAPSICUMS.



MADRAS CAPSICUMS.

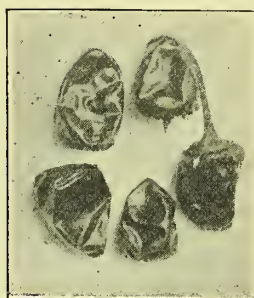
The suspected pepper contained most, but the specially ground samples showed granules similar both in shape and size. Freshly ground capsicums without previous extraction gave unsatisfactory results, but in the bulk grinding previously mentioned the granules were easily found. It appeared that with freshly-ground peppers some constituents, presumably in part oil and resin in an unoxidised state, masked the granules, and also either chemically or mechanically, or possibly in both ways, prevented staining with iodine. Even

with some extracted capsicums in which starch could easily be seen without staining, the granules, when stained blue-black with iodine, soon became colourless, and some slides after standing showed violet and colourless granules side by side.

Six samples of capsicums were now taken, the seeds separated, ground, and passed through a 30 sieve; the remainder of the fruit was in each case similarly treated. Equal quantities of the powders were extracted with chloroform, dried, and treated with water so as to separate the starch by gravitation. All contained starch. The accompanying photographs show the starch granules as observed under the microscope, the fruits that were examined, and a series of ginger starches. Throughout the starches are magnified to the same extent.

The mass of unstained granules, shown in the top photograph of the series of starch from capsicums, is not, unfortunately, adequately dealt with in a single slide. Such masses were of common occurrence in the particular sample of fruit, and when stained could easily be picked out with the naked eye.

An attempt was made to determine in what part of the fruit the starch was principally located, but without satis-



"CHERRIES."



JAPANESE CHILLIES.

factory result. In some fruits the seeds, in others the pericarps, &c., appeared to contain the greater quantity. Transverse sections of the seeds generally showed a few medium and small sized granules near the circumference, but none in the centre. In the disseminations masses of large and medium sized granules, and also cells containing minute granules, could, after staining with iodine, be picked out. The cells or spaces containing the minute granules were closely associated with the bundles of spiral vessels, to which, however, no large granules were attached.

New Books.

Blyth, A. W., and M. W. *Foods: their Composition and Analysis*. Manual for analytical chemists and others. 5th ed. 9 × 6½. Pp. 642. 21s. (Griffin.)

County Court Practice Made Easy, or Debt-collection Simplified. By a Solicitor. 7½ × 5½. Pp. 152 + Index. 2s. 6d. (Effingham Wilson.)

Flemming, L. A. *Practical Tanning: Handbook of Modern Processes*. 9½ × 6. Pp. 472. 25s. net. (Lockwood.)

Fry, T. Hallett. *Income-tax Anomalies*. 8½ × 5½. Paper covers. Pp. 39. 1s. (Horace Cox.)

Kenwood, H. R. *Public Health Laboratory Work*. Part 7, dealing with Public Health Bacteriological Work, contributed by W. G. Savage. 3rd ed. 7½ × 4½. Pp. 622. 10s. 6d. net. (H. K. Lewis.)

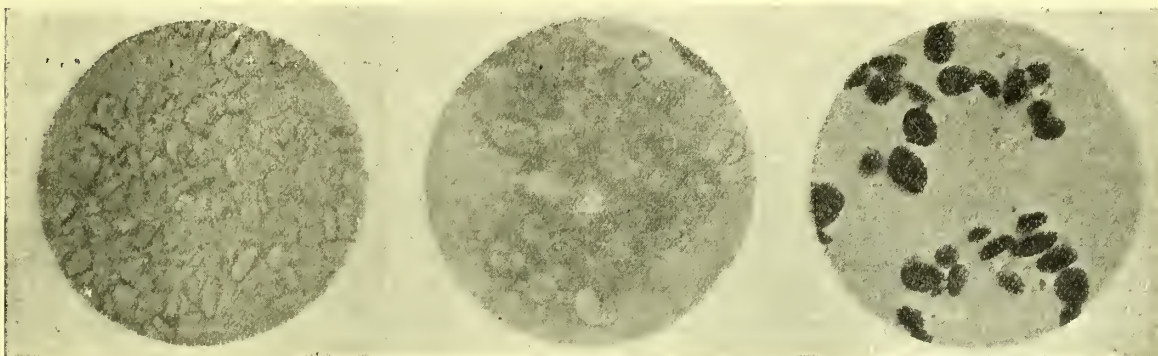
Lupke, R. *Elements of Electro-chemistry Treated Experimentally*. Edit. by M. M. Pattison-Muir. 8½ × 5½. Pp. 272. 7s. 6d. (Grevell.)

Mudge, G. P., Maslen, A. J. *A Class-book of Botany*. 7½ × 4½. Pp. 528. 7s. 6d. (E. Arnold.)

Science Physics Papers: Questions set at the Intermediate Science Examination of London University from 1895 to 1902. Cr. 8vo. Swd. 2s. 6d. (Clive.)

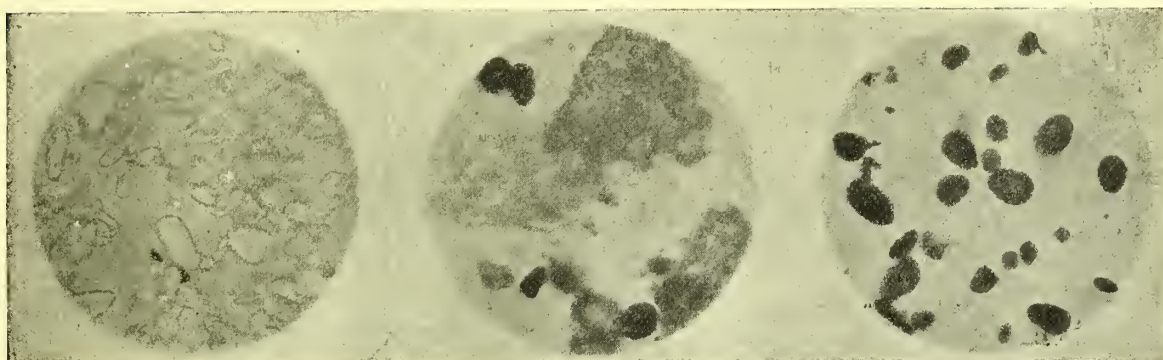
Text-book of Botany. By E. Strasburger and others. Transl. from German by H. C. Porter. 2nd ed. 9½ × 6. Pp. 682. 18s. net. (Macmillan.)

Wright, A. C. *Simple Methods for Testing Painters' Materials*. 7½ × 4½. Pp. 172. 5s. net. (Scott & G.)



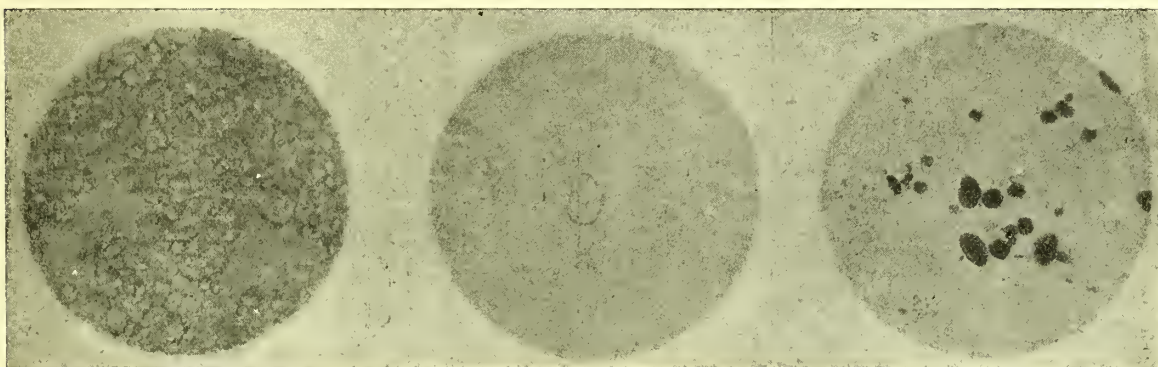
Jamaica.

Jamaica.



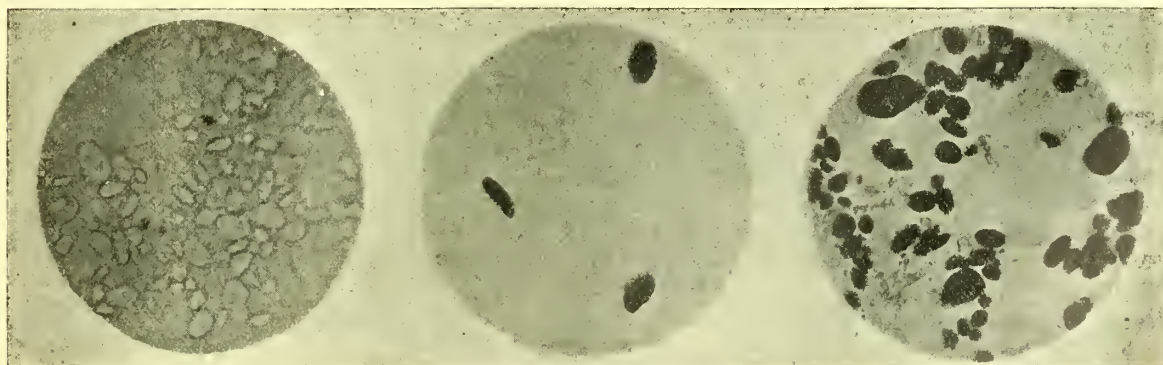
Cochin.

Cochin.



African.

African.



Japanese.
GINGERS, UNSTAINED.

STARCH FROM CAPSICUMS,
UNSTAINED AND STAINED.

Japanese.
GINGERS, STAINED.

Trade-marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. DALTON, Esq., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form J, cost £1, obtainable through any money-order office.

(From the "Trade-marks Journal," June 3, 1903.)

- 'HALEX'; for chemicals. By the British Xylonite Company (Limited), Hale End, Chingford, N.E. 254,213.
 - "STENSIA" ("Stench" disclaimed); for a chemical liquid. By W. D. Hawdon, Front Street, Chester-le-Street. 251,899.
 - "VAPORITE-STRAWSON" ("Vapor" disclaimed); for chemicals. By G. F. Strawson, 71A Queen Victoria Street, E.C. 253,678.
 - Device of a board on tree; for "Munyon's Paw-Paw Bitters." By Munyon's Homeopathic Home Remedy, Philadelphia, c/o Haseltine, Lake & Co., 45 Southampton Buildings, W.C. 246,134.
 - "LUX"; for goods in Class 3. By Lever Brothers, Port Sunlight. 250,841.
 - Combination of devices; for "Ramsey's Trinidad Aromatic Bitters." By W. E. Tyrer, New York, c/o A. M. & W. Clark, 53 Chancery Lane, E.C. 250,897.
 - Combination of devices (including a representation of the Old Pump room at Harrogate); for a "Natural Liver Salt" (being a medicinal preparation and also a preparation for producing a beverage). By Wilkinson & Simpson (Limited), 24 New Gate Street, Newcastle-on-Tyne. 252,701 and 252,702.
 - "VINOZO," for seidlitz-powders and a saline medicine; and "VINOVA," for foodstuffs. By Sutcliffe & Bingham (Limited), Cornbrook, Manchester. 253,757 and 252,475.
 - "QUINERINE" ("Quine" disclaimed); for chemicals. By G. Townsend, 139 Newgate Lane, Mansfield, and J. W. Featherstone, 27 Church Street, Mansfield. 253,805.
 - "CASTRYL"; for castor oil. By W. P. Naismith & Co., 145 Crownpoint Road, Glasgow. 254,010.
 - Device of a swift; for chemicals. By Coleman & Taylor, 7 Gresham Street, E.C. 254,117.
 - "PANUTRINE"; for chemicals. By Laboratoires Sauter Société par Actions, Geneva, c/o R. W. Baker, 56 Ludgate Hill, E.C. 254,132.
 - "GRAPHOID" ("Grapho" disclaimed); for philosophical and scientific instruments and apparatus, and for paper, stationery, &c. By Brady & Martin, Northumberland Road, Newcastle-on-Tyne. 253,488 and 253,490.
 - "KIPLO"; for photographic papers. By Elliot & Sons (Limited), Talbot House, Park Road, Barnet. 253,762.
 - "CYKO"; for photographic paper. By J. J. Griffin & Sons (Limited), 20 Sardinia Street, W.C. 253,987.
 - "YUM-YUM"; for mineral and aerated waters. By J. A. Reid, Helensburg, N.B. 254,200.
 - Combination of devices for "Hoffmann's Gloss-starch"; for starch-gloss. By the Hoffmann's Stärkefabriken Aktiengesellschaft, Salzungen, c/o Jensen & Son, 77 Chancery Lane, W.C. 253,309.
 - "DARUPAN"; for manicure-preparations. By Dr. M. Albersheim, Frankfurt a/M., c/o Walter Caroch, 188 Holland Road, Kensington, W. 253,553.
 - "BARRETT'S PODOLIA" and facsimile signature ("Podo" disclaimed); for a preparation for the feet. By E. T. Barrett, 2 Station Road, South Norwood Junction, S.E. 252,025.
 - "MOUTCEY"; for a hair-preparation. By Thérèse and Heinrich J. Wassen, 35 Munster Square, W. 254,111.
- (From the "Trade-marks Journal," June 10, 1903.)
- Device of a human foot; for glue and gelatin in Classes 1, 4, and 42. By Leiner Brothers, 6 Fenchurch Buildings, E.C. 253,731, 253,732, and 253,733.
 - Device of two acorns and the word "AQUAMOLLIENT"; for a water-softener. By W. Gossage & Sons (Limited), Widnes. 254,171.
 - "SCISSORS-BRAND"; for chemicals. By Colley & Co. (Limited), 41 Seething Lane, E.C. 251,489.

- "VANETON"; for veterinary preparations. By F. Hewthorn & Co. (Limited), 70 Finsbury Pavement, E.C. 254,110.
- "OGEE"; for a chemical. By Osborne, Garrett & Co., 51 Frith Street, Soho, W. 254,148.
- Facsimile signature on label for "Gore's Cream"; for headache, &c. By Charles H. H. Gore, 13 Granville Street, Swindon, Wilts. 249,115.
- "FATELA" ("Fat" disclaimed); for chemicals. By A. L. Pointing, trading as "Fell Formula Association," 205 Regent Street, W. 253,312.
- "LAXOIN" ("Lax" disclaimed); for a medicine. By Oppenheimer, Sons & Co. (Limited), 179 Queen Victoria Street, E.C. 253,802.
- Facsimile signature of proprietor; for a lotion for rheumatism, &c. By Matilda Broughton, 50 Torrington Place, North Road, Plymouth. 253,853.
- "VEZO"; for chemicals. By Sutcliffe & Bingham (Limited), Cornbrook, Manchester. 254,162.
- "LINEEL"; for pharmaceutical, &c., preparations. By the Lineel Company, 16 Bevis Marks, E.C. 254,206.
- "VARTAN"; for a tannin extract. By the British Dyewood and Chemical Company (Limited), 53 Bothwell Street, Glasgow. 254,298.
- "PHASTOPHO"; for an adhesive for mounting photos, &c. By Müller & Co., 62 High Holborn, London. 250,265.
- "MEFFY"; for a marking-ink. By H. Heydon & Co., 18 Old Paradise Street, Lambeth, S.E. 254,302.
- "LAC-U-MEN" ("Lac" disclaimed); for a milk-food. By Prideaux's Pure Casein and Life-Food Company (Limited), Motcombe, Dorset. 252,152.
- "OVUMALT" ("Ovum" disclaimed); for a food-preparation. By the Condensed Egg Syndicate (Limited), 85 Tooley Street, S.E. 253,470.
- Combination of devices (representing a cut lemon, with glass and two straws); for lemonade crystals and powders. By Chivers & Sons (Limited), Heston, Cambridge. 253,753.
- "NUTRIGEN"; for foods. By F. N. Corney, 96 Rendlesham Road, Clapton, N.E., chemist. 254,285.
- "BIBERO"; for preparations in Class 42. By T. Kerfoot & Co., Ashton-under-Lyne. 254,434.

ON THE RIVER.

THE staff at 42 Cannon Street had their annual outing on June 12. The party went to Cookham Ferry, where luncheon was served, and then proceeded in a special launch up the river to Henley. Fine weather prevailed.

The weeping skies withheld their drenching tears
For one short day, and thankfulness supreme
Was shown by men and maids whose timid fears
Had made them think that now the spell of years
Was to be broken, and that ne'er a gleam
Of cherished sunshine would upon them beam.

But, in spite of jeremiads that did jar,
We decked ourselves in holiday attire,
And, crowned with billycock and panama,
We hied to Cookham, where, in motor-car,
We whizzed one fleeting moment of desire,
Then scanned the beauty millionaires acquire.

With merry jest, around the luncheon-board,
We carved the duckling, picked the *mayonnaise*;
And kind St. Julien helped us till we soared
High o'er the sordid world. With one accord
We care renounced, and fixed a longing gaze
On Mother Nature in her loveliest phase.

The mellow eloquence of Veteran's speech
Responsive chords aroused in every breast.
But, wandering eye, still truant, sought the breach
That showed through foliage of the trees that reach
Down to the river, where our boat at rest
Lay low, in patience waiting our behest.

Then on we glided, chanting tribal lays,
Gaily to Henley, chortling in our glee.
Out burst the sunshine breaking through the haze,
And filling the air with green and golden maze.
None surely blest so bountifully as we
Whom sun-kissed maidens smiled upon so free.

The Assistants' Page of News.

THIS WEEK'S "C. & D." IN BRIEF.

A CONCESSION in regard to naming remedies is announced by the Board of Inland Revenue (p. 985).

—EXISTING LAWFULS may be used up to September 30 without risk of proceedings being taken by the Board against any person.

THIS APPLIES to qualified and unqualified chemists, limited companies, and other shopkeepers.

THE B.P.C. pink circular is out (p. 969).

DENTAL NOTES are a feature in this issue. See p. 993.

A MEDICINE-STAMP LAW for France is proposed (p. 972).

ANOTHER salt for students of pharmacy to analyse is announced on p. 968.

A MENTHOL-CONTRACT is the subject of interesting litigation in Japan, which we report on p. 930.

"MR. EKINS," by Dr. John Attfield, F.R.S., is the title of an entertaining little epistle on p. 931.

THE EXAMINATION IN BANKRUPTCY of the partners of Ashmore & Sons, Mincing Lane, is reported on p. 988.

THE JACOB BELL SCHOLARSHIPS EXAMINATION was held this week. We epitomise the questions on p. 994.

PROFESSOR W. J. POPE, F.R.S., has been presented with the Longstaff medal of the Chemical Society (p. 977).

EARLY-CLOSING LEGISLATION looks like going forward owing to a proposed Avebury-Dilke amalgamation (p. 931).

OUR PARIS CORRESPONDENT gives some particulars regarding the centenary of the Society of Pharmacy there (p. 972).

FACTORS for testing citronella oil are communicated by Messrs. Parry and Bennett (p. 999). We comment on their observations on p. 985.

SHEFFIELD CHEMISTS are, through Mr. Newsholme, to welcome the British Pharmaceutical Conference to the City of Steel in 1904 (p. 976).

THE Ethics Committee of the British Medical Association has been chastising the doctors named in a list issued by Parkes' Drug-stores (p. 986).

STARCH exists in capsicums. The fact has not hitherto been definitely observed, but Mr. J. C. Stead proves it in an illustrated article on page 1,000.

DR. T. E. THORPE has devised an electrolytic method of detecting arsenic in beer, which he described to the Chemical Society on Wednesday (p. 977).

A MAN who was in the habit of getting a hypnotic mixture from Messrs. Vine & Froom, Aldersgate Street, died, and it is stated that he got the wrong medicine. The inquest is reported on p. 970.

ALEXANDER CROSS & SONS (LIMITED), Glasgow, have been fined under Section 17 of the Pharmacy Act for selling to an unknown person, and otherwise improperly, sufficient arsenic to kill 200 people (p. 978).

A WELL-KNOWN EDINBURGH VETERINARIAN, who is also a chemist and druggist, is giving 15,000*l.* towards promoting the affiliation of the Royal (Dick) Veterinary College with the Edinburgh University (p. 971).

THE ABERDEEN Sheriff has decided that a co-operative society which has signed an anti-cutting agreement and continues to give checks to customers on purchases of the protected article does not break the agreement (p. 978).

THE BRADFORD County Court Judge has argued with counsel the question of committing to prison those who do not pay Pharmacy Act penalties which they have incurred. If the Judge's view is right, the Pharmaceutical Society is armed with a strong weapon against offenders (p. 979).

THE DRUG AND CHEMICAL MARKETS remain very depressed, shellac being the only article showing any life. Cream of tartar, French and German refined camphor, and saltpetre are higher. Cascara sagrada, sulphate of copper, cajuput, and geranium oils are firmer. Castor oil is essier, and quinine in second hands is lower. A reduction in makers' prices would not be surprising (p. 995).

MAINLY PERSONAL.

THE examination for the Jacob Bell Scholarships has been held this week.

BOOTS CASH CHEMISTS (LIMITED) are opening a new branch shortly at 7 and 9 Bond Street, Leeds.

MR. D. LEWELLYN JONES, chemist and druggist, has opened a new pharmacy at 3 Ivy Buildings, Colwyn Bay.

THE "Old Drug Stores," 100 Cowbridge Road, Cardiff, has been acquired by Mr. A. S. Price, chemist and druggist.

THE Plymouth Drug Co. (Limited), Cornwall Street, Plymouth, will shortly open a branch at Mutley Plain, Plymouth.

THE business lately carried on by Mr. F. W. Fox, chemist and druggist, at Redbourn, Herts, has been acquired by Mr. Whitaker.

MR. W. TAYLOR ROBSON, chemist and druggist, Berwick-on-Tweed, has purchased the business of Mr. Thomas Weir at 59 Great Junction Street, Leith, N.B.

MR. F. L. TREMEER, son of Mr. J. J. Tremeer, chemist and druggist, Barnstable, won in 12½ seconds the 120 yards strangers' handicap at the Civil Service Athletic Sports at Stamford Bridge on June 13.

A DUNDEE apprentice, Mr. Henry Dunn, rescued an old man who fell into the Tay last week. Mr. Dunn not only got the man out of the water, but helped to render first aid until the man's removal to the Infirmary.

ON June 12 Mr. F. J. Gillespie, L.P.S.I., late of Messrs. S. C. Nicholl & Co., pharmaceutical chemists, Donegall Place, Belfast, was presented with a gold Albert and pendant by his friends in Belfast, on the occasion of his leaving to fill an appointment in South Africa.

A BOTANICAL EXCURSION in connection with the Nottingham School of Pharmacy was held on June 16. The students, accompanied by the Principal, Mr. A. Russell Bennet, visited Hoveringham Woods, and, under splendid weather conditions, had a most successful ramble.

THE next analysis set by Dr. Dobbin in the Corner for Students consists of a mixture of not more than three salts for qualitative examination. Applications for portions will be received up till June 23. Only apprentices or assistants preparing for the Minor are eligible for prizes.

AN unqualified chemist's assistant at Bradford was fined under the Pharmacy Act, but has not paid the penalty. An order of attachment was applied for before Judge Bompas at the Bradford County Court, but the state of the law on the subject appears to be so complicated that the Judge has reserved his decision.

JAMES PHILIP KFELEY, chemist and druggist, Station Terrace, Blackpool, appeared for his public examination in bankruptcy at Preston on June 12. He attributes his insolvency to being made responsible for money stolen from his father's shop when he was acting as postmaster. The deficiency amounts to 58*l.* 6*s.* 1*d.*

MR. JESSE BOOT offers four scholarships (two of £52 10*s.* each and two of £35 each) to help assistants who have been employed in his companies for two years to qualify for the pharmaceutical qualifications. The competitive examinations for the scholarships embrace the subjects dealt with in the Minor syllabus.

THE Royal Dick Veterinary College, Edinburgh, is having its educational scheme reconstructed. The Edinburgh University is making arrangements by which a veterinary science degree will be conferred on students who pass through the curriculum of the college and attend such classes in the University as may be prescribed.

AN ASSOCIATION OF ASSISTANT LICENTIATES of the Apothecaries' Halls, London and Dublin, has been formed. Office-bearers have been appointed, besides about fifty honorary local secretaries in Great Britain and Ireland. The President is Mr. A. T. Gott, of Bradford, and the Secretary Mr. Chas. F. Forshaw, 48 Hanover Square, Bradford.

THE assistants in the drug department at Harrod's Stores, Brompton Road, W., have caught the walking fever. Eight of them walked through the rain on June 13 from Hyde Park Corner to Windsor (twenty-three miles). Messrs. Smith, Kelsey, and Curtis were the first three. Dundee chemists' assistants are also infected. They walked from Longforgan to Dundee (seven and a-half miles) after closing-time the other night. Mr. A. Barrie won first prize.

Exchange Column—Bargains.

TERMS.

$\frac{1}{2}$ d. per word with name and address. 1d. per word if we register the address and attach a number.

No Advertisement inserted for less than 6d.

Remittances payable to EDWARD HALSE, and crossed MARTIN'S BANK, LIMITED.

FOR DISPOSAL.

BOOKS AND PERIODICALS.

- 8s. Rouse's "Prescription Book"; quite new; what offers? RIX, Chemist, Caversham, Reading.
- "Pharmaceutical Journal," posted Monday; what offers? JENNER, Chemist, Meeting House Lane, Peckham.
- "The Dispensatory," in 7 divisions; Quain's "Dictionary of Medicine," 1885, in 6 divisions, new, cost 65s.; the lot 24s., paid. H. M. ASHTON, Chemist, Warrington.
- Roberts's "Medicine," 9th ed., 7s. 6d.; Kirke's "Physiology," 15th ed., 5s.; Pye's "Surgical Handicraft," 4th ed., 3s.; Herschell's "Indigestion," 1s.; all good as new; post free, cash with order. WILLIS, Chemist, Alresford, Hants.
- Kipping's "Organic," 2s. 6d.; Attfield's "Chemistry," 6s.; Green's "Botany," vol. I., 3s.; Whiteley's "Calculations," 1s.; "Materia Medica Synopsis," 1s. 6d.; Remsen's "Organic," 2s. "CHEMIST," 8 King's Square, Goswell Road, E.C.
- 15 vols. *Pharmaceutical Journals*, '70-'85; 20 vols. *Year-book of Pharmacy*, '70-'89; a lot of old works on chemistry, old "Pharmacopœias," and other miscellaneous books; worth the attention of collectors; send for list. MAGGS, Casula, Yeovil.

DRUGS AND CHEMICALS.

- Sell cheap, 1-cwt. carboy triple rose-water. MITCHELL, Fagley Terrace, Bradford.
- Chemist's fresh drug stock to be sold; open to an offer. Address, "G. N." (250/19), Office of this Paper.

OPTICAL AND PHOTOGRAPHIC.

- $\frac{1}{2}$ -plate camera, with double dark-slide, tripod, and R.R. achromatic lens; very little used; price 35s. W. S. RAMSDEN, Mirfield.
- What offers? Plates (Ilford): 6 doz. "Empress" (whole), 4 doz. ordinary, 3 doz. spec. "Rapid," 5 doz. "Empress" (5 x 4). SKINNER, North Tawton.
- Busch $\frac{1}{2}$ -plate roll-film camera, detective aplanat, f 6, leather case, all good condition, £3 15s.; No. 3. "Junior" kodak, $\frac{1}{2}$ -plate, R.R. lens, and case, a good instrument, little used, cost over £8, price £4. WRIGHT, Chemist, Burnley.

PROPRIETARY ARTICLES.

- New Skin; 20 doz. 7 $\frac{1}{2}$ d., 5 doz. 1s. 1 $\frac{1}{2}$ d. WILLIAMS, Chemist, Bourne-mouth.
- Overstocked.—About 4 doz. 1-lb., 3 doz. 2-lb. tins Brown's ammoniated soft soap; what offers, carriage paid? FROST, Wednesbury.
- Overstocked.—3 doz. Johnson gold, 18s. 1d.; 4 $\frac{1}{2}$ doz. Collis Browne chlorodyne, 8s. 6d.; 56 tins Welsh honey, 7d.; net carr. paid. WILLIAMS, Holyhead.
- Brown's ammonia white soft soap; 4 doz. 2-lb. tins, 3s. 6d. doz.; 4 doz. 1-lb. tins, 2s. doz.; carr. paid. TURNER'S DRUG STORES (LIM.), Hipperholme, Halifax.
- Surplus stock, about gross each.—2s. 9d. Doan's kidney-pills, 23s. 6d. doz.; Williams's pink pills, 23s. 6d. doz.; Steedman's powders, 8s. 9d. and 21s. 6d. doz.; Carter's liver-pills, 10s. 9d. doz.; bile beans, 11s. 9d. and 26s. doz.; cash with order; carriage paid. SHIRTLEIFF, Chemist, 66 Goldhawk Road, London, W.

SHARES.

- Shares for sale.—See Miscellaneous column (p. 66).
- Camwal 5% preference shares; 25 for disposal. Address offers, 248/5, Office of this Paper.
- For sale, 10 Camwal preference shares, 17s. 3d. "CHEMIST," 11 Gayville Road, Wandsworth.

SHOP FITTINGS.

- Gledhill's cash-till; £1 on appro. if carriage paid. COLLIS, Bath.
- Four 4-gal. pear-shaped carboys, with stands, 30s. LAWRENCE, Chemist, Rhyl.
- Part of set of chemist's fittings, shop-rounds, drawers, &c. "S., 155 King Street, Hammersmith.
- Window-enclosure, mahogany, 2 double glass doors. SWIRE, 193 Queen's Road, Halifax.
- For sale, complete set of chemist's shop-fittings. Full particulars, write, 245/26, Office of this Paper.
- Maw's large specie-jar, with royal arms and gilt-glass top; also mahogany stand for above; good condition, at half Maw's list; also 2 Poth's duplex carboys, at two-thirds Poth's list; all free on rail. CLARKE, Chemist, Kingston-on-Thames.

MISCELLANEOUS.

- Dental chair, good condition; 5 guineas; bargain. DENT'S, 120 Greyhound Lane, Streatham.
- Offers.—4 cwt ivory black, 6-gal. pear-shaped carboy. ALLWOOD, High Street, Market Harborough.
- What offers? Becker's balance, complete; nearly new. BRIDER, 42 Manchester Street, Southampton.
- 12 Dental forceps, new, accept £0s., cost over 70s.; adjustable show-stand (new, cost 30s.), 100 Fairbank's tar-soap, No. 2 F. P. Kodak, what offers? 242/8, Office of this Paper.
- 10-gal. copper still, perfect, 35 in. high, 14 in. diameter, weight 39 lbs., 21s.; block-tin condensing-worm, perfect (in leaky barrel), 7s. 6d.; 8-gal. cylindrical York Glass show carboy, cut stopper, 9s.; 3-grain pill-machine for 12, 8s. 6d.; dentist's ebonised bent-glass street show-case, 31 x 13 x 6 $\frac{1}{2}$ in., 15s. 6d.; Maw's fig. 4 (page 295) window show stand, 2 ft. high, 10s. 6d.; Maw's fig. A glass show-jar, 15 $\frac{1}{2}$ x 6 $\frac{3}{4}$, 3s. YOUNG, Chemist, Leicester.
- Overstocked.—What offers? Dark-room gas-lamp, 10 x 8, ruby glass, yellow fabric, 4s.; "Brownie" camera, soiled, 3s.; varnished wood $\frac{1}{2}$ -plate negative-boxes; tubular aluminium $\frac{1}{2}$ -plate stand, 12s.; walking-stick stand, 7s.; extra large ditto, extending, 10s.; 29 Rayne's 6d. marking-ink pencils; 10 feeding-bottles, shape as Maw's old-fashioned; 3 doz. carholie tooth-powder tins, 6d. size; 6 doz. ditto boxes, 6d. size; 18-in. circular red-rubber air-cushion, new; 3 soiled elastic stockings, No. 5; 2 doz. imitation cut-glass toilet and smelling bottles, 1-2 oz.; metal bed-pan and pad (Sanger, fig. U), 5s.; *Pharm. Journal*, bound, 1869-1881 inclusive, also 1897-8; *Year-book of Pharmacy*, 1870-1900 inclusive; 6 Greece glass pocket inhalers, metal top, cost 1s. 6d. MELBOURN, 11 College Crescent, Hampstead.

WANTED.

- Old electric lamps and scrap platinum. P. ROWSELL, 9 Derwent Grove, E. Dulwich.
- Shop-fittings; good condition and cheap. "CHEMIST," 53 Sydney Street, Stockton.
- Old artificial teeth; cash by return. MESSRS. DENT, 120 Greyhound Lane, Streatham.
- Secondhand complete modern fixtures and fittings; cheap. Particulars to 246/3, Office of this Paper.
- Show carboys (a pair), swan-necked, 2-gal. Lowest price, TILLOTT, Chemist, 55 Wood Street, Westminster.
- Some 4-lb. ointment (shop) jars; pink or dark-blue preferred. Apply, HINES, 86 St. James's Road, Holloway.
- A tincture-press, in good condition; at least 1-gal. State price and full particulars to "PHARMACIST" (69/37), Office of this Paper.
- Bottles, shop-rounds (gold recess labels, wide and narrow mouth); also 4-lb. ointment jars. Apply, RESTALL (LIMITED), 35 Moseley Road, Birmingham.